THE LIFE OF SAMUEL WHITE

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Inscription
Nil

To Sir William Loudon
As a small token of appreciation
for all you have done for
our Fauna & Flora, &
with very good wish
from the author

T. A. White

15/11/20

MUSEUM OF VICTORIA
31537

To J Sowden Nov 1/20
009/54

THE LIFE OF

SAMUEL WHITE

SOLDIER
NATURALIST
SAILOR

BY HIS SON

CAPT. S. A. WHITE, C.M.B.O.U., C.F.A.O.U.

Reedbeds, South Australia.

ADELAIDE :
W. K THOMAS & CO., PRINTERS, GRENFELL STREET

1920.

TO MY MOTHER,

WHO, THROUGH A WIFE'S ASSISTANCE AND COMPANIONSHIP,
ENABLED SAMUEL WHITE TO ACCOMPLISH MUCH ; AND,
THROUGH A MOTHER'S LOVING CARE TO A SON
IN CHILDHOOD, HAS ENABLED HIM TO
COMPILE THIS RECORD.

FOREWORD.

The first 16 pages of this little book deal with Samuel White's father. The writer deems it necessary to give his readers some idea whence Samuel White inherited his indomitable spirit.

It is hoped that a small volume, portraying the life of John White, will follow this publication on the life of his son Samuel.

PREFACE.

The writer has felt for some time that such a remarkable life as that of Samuel White should be placed upon record for all time but, unfortunately, this brief sketch does not do the Naturalist full justice. Although my father kept very complete diaries from an early age they most mysteriously disappeared after his death. The compiling of this biographical sketch (it cannot be called anything else) of the life of a Pioneer and early Naturalist, is based upon a few remaining letters, notes of his early life, and notes compiled during the last twelve months he lived, added to by personal memories of the writer and those of his brother William, who still survives. Should the diaries come to light, which I still hope will be the case (for surely there cannot be so shocking a vandal who would destroy them), it would be necessary to publish them in full. In the meantime this must suffice to show that between 1835 and 1880 there lived a man who inherited a wonderful spirit and nature from his father and which can be summed up but in one word "indomitable."

S.A.W.

10/8/20. "Weetunga," Reed-beds.

SAMUEL WHITE

AT 25 YEARS.

AT 30 YEARS.

AT 35 YEARS.

AT 38 YEARS.

1.—THE FATHER LEAVES ENGLAND.

The "Tam o'Shanter" left England on July 20th, 1836, and she first called at Kingscote or (as it was then called) Nepean Bay, on November 20th, 1836. On December 14, 1836, she sailed up the Gulf and dropped anchor off Glenelg, then called Holdfast Bay, remaining there four days. She sailed round to the Port River, (December 18), where she stuck on the bar for three days. John White had chartered much space on board this ship (more than half) for implements, stock, house-building material, such as weatherboards, cement, etc.; he also brought out nine men, some with families, three of their names being Brown, Vering, and Sydenham. When the ship stuck on the bar, many things were lost overboard, amongst others much of the building material. The wood was washed up on the beach, and later on was collected and brought round the coast to what is now called Henley Beach; it was then conveyed by men upon their backs across the then wide swamp, and part of it used in the first house at the Reedbeds, as shown in the illustration. The following is a copy of a letter written by my grandfather to one of his men on Kangaroo Island, describing the landing in South Australia, and I will leave the reader to imagine the trials of John White and party, as they landed in a muddy creek and swamp with all their goods and chattels. This letter must have been written a week or so after the landing. The letter was dated January 2, 1837, and reads as follows:

"I was very glad to hear from you, and also to know that you are getting on with the building; pray get on as fast as you can. I should not have undertaken the work, only that I wanted to keep the men employed until I was ready for them here. We have met with dreadful misfortunes since we left you on Kangaroo Island, for when the vessel was passing over the bar into the River she went aground, and we were stuck three days. It took ten men at the pumps to keep the water out, and at one time there was 9 feet of water in the hold, and much of the cargo was spoilt. Some cargo was spilt overboard, and we had to construct rafts with the timber, and in placing my goods upon them many were lost. Your chest and much of my best and most valuable dry goods were

on one raft floating about for ten days; your tools have suffered but very little, but my best and most valuable dry goods have suffered dreadfully. The old "Tam" is supposed never to go to England any more. I will tell you all the particulars when I see you, which I hope will not be long.

The Governor has only just arrived, and we expect to get to business and on to the land very shortly. We have landed at a dreadful place, being obliged to lug everything through a bog of a quarter of a mile wide to dry ground; all you who landed on Kangaroo Island fared the best.

I had to pump in my efforts to save my property for 48 hours almost without a rest, till I was done. We are lying out in the open air almost devoured by mosquitoes and other vermin.

The place selected for the town is a beautiful piece of land, fresh water and no vermin, but we shall have to convey all our things eight miles overland. Shephard sends his best wishes to you all, and tell Martin he wants the key of the box if he has a chance to send it over.

Don't make the worst of our misfortunes, because if it gets to England it will do a deal of harm and prevent many intended settlers from coming out. What ever you do, get on with the job as fast as you can, for I will want all of you here very soon. Give my regards to all,

Yours,

JOHN WHITE.

Not only did John White charter much space on the "Tam o'Shanter," but on board many other vessels bound for South Australia. Two bills of lading now before me read as follows—Shipped in good order, and well-conditioned by Godwin & Lee for Mr. J. White in and upon the good ship "Coromandel," whereof is master for this present voyage "William Chesser," and now riding at anchor in the River "Thames," and bound for South Australia.

One hundred and ninety-eight Packages, being marked and numbered as in the margin, and are to be delivered in like good order, and well-conditioned at the aforesaid port of South Australia

(The act of God, king's enemies, fire, and all and every other dangers, and accidents of the seas, rivers, and navigation of whatever nature and kind whatsoever excepted)

unto Mr. Jno. White
or his Assigns

Freight for the said goods PAID HERE
ship lost or not.

With primage and average accustomed IN WITNESS whereof the Master or Purser of the said ship hath affirmed to four Bills of Lading, all of this tenor and date, the one of which four Bills being accomplished the other three to stand void.

Dated, London, 25th August, 1836.

Not accountable for leakage
and contents unknown to

Wm. CHESSER.

The reverse side reads: (written)

The landing of the outward cargo is to be at the risk of the shippers or company, and application shall be made to the captain for the delivery of the goods therein mentioned within seven days of the ship's arrival at her port of discharge, and if such delivery be not made, the Captain be at liberty to proceed with the ship on her intended voyage to Calcutta and then land the cargo.

Wm. CHESSER.

This document bears a duty stamp of three shillings. The second Bill of Lading is very similar to the preceding one, only it bears the sketch of a full-rigged ship under all sail in the corner, and is made out by Marshall & Edridge to John White at Port Adelaide, in and upon the good ship Kingston, Master J. B. Harwood, and is for twenty packages of merchandise, dated in London, 4th December, 1846. Ten years after John White landed in Australia, there were many more shipments, all tending to show that one of the earliest pioneers was determined to give the new country a fair chance. After the landing in the Port River, the "Tam o'Shanter" went up into a muddy creek, which subsequently bore the ship's name, and became in a such leaky condition that the water filled her; she was afterwards repaired sufficiently to start for Sydney, but leaking so delayed her that she had to make the Tasmanian coast at the mouth of the Tamar, when she was run aground and sold for £470. Capt. Freeman was in charge of the "Tam o'Shanter" from England, and her passenger list contained the following names:

IN THE CUDDY.

Mrs. Freeman	Mr. Junke
Mr. J. White	Mr. Nation
Mr. Walters	Mr. Blunden
Mr. Gilbert	Capt. Bromley
Mr. James (surg.)	Mr. Barnard
Mr. G. White	Mr. T. Masters

STEERAGE.

No. 1.—Mr. Allen, Mr. J. Allen, Mr. I. Allen, Mrs. Allen, Misses Allen (two), Mr. Lee, Mrs. Lee. No. 2—Mr. W. Jaques, Mr. Mosely, Mr. Clark, Mr. Robinson, Mr. Vosett, Mr. Makes. No. 3.—Mr. W. Phillips, Mrs. Phillips, three children. No. 4.—Mrs. Rogers, F. Rogers, R. Rogers, W. Rogers, J. Rogers, Mr. Catchlove, C. Catchlove, Jane Catchlove, S. Catchlove. No. 5.—Mr. Forbs, Mr. Wood, Mr. East, Mrs. East, Mrs. Wood and child, Mrs. Forbs and 2 children. No. 6.—Mr. T. Maslin, Mr. McGaplen, Mr. Wilmot, Mr. Putty, Mr. Firth. No. 7.—Mr. Guthrie, Mr. Parker, Mr. Turnbull, Mr. Hennas, Mr. Wheeler.

Soon after landing, John White made his way to that piece of the country afterwards called the Reedbeds. Of course, he had taken up land before leaving London, and the following letters now before me touch upon this. They are dated 6 Adelphi Terrace, London:

21st November, 1835.

Sir,

I beg leave to send you on the other side a copy of a resolution passed this day at a meeting of the purchasers of land in the proposed Colony of South Australia, and to state to you that it was particularly requested at the meeting that, in addition to transmitting you such copy, I should impress upon you the importance of your complying with the terms of the Resolution by paying the remainder of your purchase money by Saturday next, at furthest.

21st November, 1835.

Sir,

At a meeting of the purchasers of land in the proposed Colony of South Australia held this day (J. H. Fisher, Esq., in the chair) to take into consideration a communication from Capt. Hindmarsh to the effect that His Majesty's Government would not give direction for getting ready the ship of war

which is to convey him, and those who are to accompany him in the first expedition, until the whole of the £35,000 is actually paid for the purchase of the land.

It was resolved:

That it is highly important to the interests of the intending colonists that the first expedition should sail as soon as possible, so as to guard against the loss of another season, which might otherwise arise, and therefore, that those present would immediately pay up the balance of their purchase moneys, and that applications be made to such purchasers as are not present, urging the necessity of their doing the same on their part, and instructing them accordingly so to do.

Some of the intending colonists backed out at the last, and made over their land to those who would take it and brave the undertaking. The following document will show that John White was quite confident of the undertaking, and ready to add to his liabilities:

I, John Garden, of St. Peter's College, Cambridge, in consideration of the sum of eighty pounds eight shillings to me paid by Mr. John White. The receipt hereof I do hereby acknowledge, do hereby assign and transfer to the said John White, his heirs and assigns, all my rights and interests in and to the Country Section of lot of land referred to in the Land Order, No. 272, and required that a grant of such country section of land may be made to the said John White, his heirs and assigns accordingly—a similar form of transfer attached to the Land Order having been signed by me.

(Sgnd.) JOHN GARDEN.

Witness—John Morphett.

A letter in my possession, addressed to Mr. John White, dated Adelaide, 13th March, 1837, reads:

Sir,

You are requested to attend a general meeting of the holders of the first 437 South Australian Land Orders, which will be held on Wednesday next, the 15th inst., at one o'clock in the afternoon at the office of the Deputy Surveyor in this place, for the purpose of deciding the order in which the Town Lands shall be selected, pursuant to the regulations for the preliminary sales.

Mr. John White,
Reedbeds.

I am, Sir,
Your most obedient servant,
J. H. FISHER,
Colonial Commissioner.

About this time friction seems to have arisen between some of the colonists and the Colonial Commissioner (Mr. Fisher); the outcome of this was a circular letter addressed to all the principal colonists, and the one addressed to John White reads:

Adelaide, 31st July, 1837.

Sir,

I feel it to be so essential to the continuance of the unanimity which has hitherto so happily existed amongst the principal body of the colonists of this province, and which, I venture to say, is unexampled in the history of colonization, that a spirit of candour and openness (which is the criterion of gentlemanly and manly conduct) should prevail with all amongst us, that I shall resist as far as is in my humble powers, every attempt to excite or promote a deviation from it. There are various modes by which that deviation may be affected, though it is almost a truism to say the attempt is not be expected; but from someone, who has neither the sense or feelings to estimate the value of the spirit to which I have referred. One of these modes is the anonymous propagation of slander, or what is equivalent to and intended as such; a similar propagation of insinuations artfully expressed but containing no direct charge; nevertheless, implying breaches of trust or confidence.

In the South Australian Gazette of Saturday last, there has appeared two anonymous letters, signed "A Colonist," dated the 6th and 10th instant, and my answer to the Editor of that paper respecting them.

I have attempted to ascertain the author of these letters by an application to the editor, fully anticipating that the person who could by not "daring" to affix his name to either of the letters so sensibly and perspicuously illustrate the privilege he boasts of in his second letter, of living in a country where the press is free, and where "men dare speak their minds" would, of course, have been happy of a further opportunity of showing how much he felt the value and importance of such a privilege; but, as you will see by the editor's remarks, I have not succeeded. I am resolved, however, to persist in my endeavour to obtain that object, and I trust that by this general appeal, which I am constrained to make, as the best course which suggests itself to my mind, I may be enabled so to do. I beg, therefore, you will pardon me for requesting of you that you will in the fullness of that spirit to which I have referred, be good enough to send me a few lines, disclaiming or otherwise (as the fact may be) the author-

ship of the two letters in question or either of them, or stating whether you know or not, who is the author. I should have felt great pain in submitting such a question to you were it put to you solely and individually, but as I have made this a circular to be addressed to numerous others, I doubt not you will view the request in the proper light, and enter into my feelings, which are only to elicit a fact which I am determined to follow up by a public reply to the letters in question

I am, Sir,

Your most obedient servant,

J. H. FISHER,

Colonial Commissioner.

Mr. John White,
Reedbeds.

From the earliest time, John White was looked upon by his fellow colonists as possessing very sound judgment, and was called in to arbitrate in many cases of dispute; one of the earliest cases I have record of is in reference to a bookcase in the Colonial Office of the Secretary in 1837. A document before me reads:

Adelaide, November, 21st, 1837.

We, the undersigned, John White and Robert Soth, having surveyed and valued the bookcase in the colonial office, and being of a difference as to the value, agreed mutually to call in Thomas Bell to value the same, and we now agree that the value of the piece of furniture is twenty-five pounds.

John White, Robt. Soth, Thos. Bell.

In 1841, a dispute arose over the new gaol, John White having given his services as architect for additions to the gaol. A letter, dated Adelaide, 21st April, 1841, states:

To the Hon. E. C. Frome,

We have the honour to acknowledge the receipt of your letter of the 19th, relating to the extra work of the New Gaol, acquainting us that in consequence of the discrepancy between our statement and that of Mr. Kingston, that His Excellency has been pleased to approve of the recommendation of the Committee that the points in dispute should be referred to two parties for settlement—that on the part of the Government, Mr. Hancock has been named, requiring that we would name a party on our part, and that these two persons whose decisions shall be final in the event of being called in.

We beg leave to express our perfect and entire concurrence in this mode of settlement, and on our part, we name Mr. John White, of the Reedbeds.

Borrow and Goodiar

2.—FARMING OPERATIONS COMMENCED.

The old pioneer could not have lost much time in getting in some crops, once he had the land allotted to him, for I hold a copy of a letter written to Governor Gawler in 1839, in which he describes the success he had with most of his crops. The letter is as follows:

May it please Your Excellency,

To state that I have forwarded to you this day some samples of grain grown by me on my farm at the Reedbeds, preliminary section 194, this being the only corn at present grown in the colony, after the proper method of farming, ploughing and harrowing.

Herewith Your Excellency will find enclosed a full description of growth and management. I would feel very much obliged if you would forward same with samples to the Commissioner in England to show the people who are likely to come out to this new country, that with common management all sorts of English crops and vegetables will grow abundantly.

I can assure Your Excellency that I have had splendid crops of such vegetables as potatoes, peas, cabbages, turnips, spinach, onions, and many others, and as you know, I have had the pleasure of sending vegetables for your table from time to time for some time past.

THE WHEAT was grown under many difficulties, for I could not get possession of my land till very late in the season; then I had to clear and plough it owing to the great amount of growth and rubbish, the ground was very badly worked; the seed was thrown in, the want of labour being a great drawback. Nothing more was done to the crop till it was reaped. The seed was planted in the latter end of August, and reaped in the beginning of January, 1839, it reaped 54 bushels to the acre, and the quality of the grain speaks for itself.

THE BARLEY was put in precisely in the same way as the wheat, with the exception that the barley was not so long in the ground, only three months and sixteen days, it yielded 52 bushels per acre, and weighed 54 lbs. to the bushel, and it is stated by those who are good judges of grain to be of the finest quality.

THE OATS came from a most promising crop, but unfortunately, a month before harvesting the cattle broke in, and chewed off the heads, but to my surprise, although in full head, and nearly ripe, they grew from the bottom again, and harvested 20 bushels to the acre, as per sample sent herewith.

THE PEAS were in very much too late, yet yielded a fair crop.

MISTLETOE BIRD

(*Austrodicaeum hirundinaceum*)

Drawn in Water Colours by Samuel White at the age of eighteen years.

THE INDIAN CORN.—There never was anything so splendid. I put the seed in in November, and it grew from eight to fourteen feet in height, cobbed four, five and six on each stem, and from 400 to 1,000 grains to each cob.

POTATOES.—I planted a large plot of ground in early December, which is the mildest month, and dug a splendid crop in the early part of February, only 10 weeks. I find I can grow potatoes every month of the year in this country. I have grown English grasses and clover with great success. There are many other things I have tried, and found grow splendidly, but must refrain from enumerating them, for I am afraid I have trespassed too much upon your Excellency's valuable time.

Believe me to be, Your Excellency,
Reedbeds, Yours obediently,
April, 1839. JOHN WHITE.

Will the reader pause for a moment to think of the great forethought of this fine old pioneer in bringing out with him such a diversified collection of plant seeds; also of the great labour required to cultivate such crops upon such a large scale when we take into consideration the nature of the ground, heavily timbered and heavy virgin soil when cleared, taking a great amount of breaking up, and as he says, "No labour to be had;" yet this enterprising Englishman was growing barley, oats, wheat, Indian corn, peas, potatoes, besides many other crops and vegetables by the acre, only two years after the proclamation of the colony.

Let us turn to these times of ease and luxury, and how often do we see settlers who take up new country, in the lap of luxury compared to the conditons existing in our old pioneers' days. Yet it is years before our present day settlers have a garden about their place, and in many instances, never.

My grandfather brought out a most wonderful stock of implements and tools of all descriptions, and he seems to have thought nothing of lending them to those who were without; even the Governor and many of his officers were glad to avail themselves of John White's forethought—the following notes show this:

One short note (not dated, but written in 1837) from the Governor says:

Will Mr. White please loan one hundred and fifty nails, also one large and one small clasp, for the fittings of Government House?

To Mr. White, (Sgnd.) John Hindmarsh.
Reedbeds.

Another note, dated Adelaide, October 11, 1839:

Would Mr. White please supply marines with two trowels for Government works.

Mr. John White,
The Reedbeds.

(Sgnd.) T. B. STRANGWAYS.
Colonial Secretary (pro tem.).

Another dated Adelaide, August 17, 1837:

Can Mr. White please supply the following timber to Mr. Bell on loan, for the purpose of fitting up the dispensary and infirmary?

To Mr. John White,
The Reedbeds.

(Sgnd.) THOS. GILBERT.
Storekeeper.

3.—HIS TOWN AND OTHER PROPERTY.

In March, 1837, the Government began to bestir themselves in allotting the land taken up in England by the settlers, for the Government began to want money; therefore, they looked to the selling of some land for that purpose, but they had first to allot the 437 Land Orders, which the following letter shows:

Adelaide,
13th March, 1837.

Sir,

You are requested to attend a general meeting of holders of the first 437 South Australian Land Orders, which will be held on Wednesday next, the 15th inst., at one o'clock in the afternoon, at the office of the Deputy Surveyor in this place for the purpose of deciding the order in which the Town Lands shall be selected, pursuant to the regulations for the preliminary sales.

Mr. John White.

I am, Sir, Your obedient servant,
J. H. FISHER.

This brings us to John White's town property; how many acres he originally took out in the City of Adelaide I am not sure of, but I know by receipts for rates paid in 1850, that my grandfather owned eleven town acres, and nineteen (19) in North Adelaide. In the first instance North Adelaide was considered part of the town of Adelaide.

In some cases, those who came out to the New Colony without taking up any land just squatted down on a piece near town, and started to work it, as the following letter from John White to the Governor will show:

HOUSE BUILT BY JOHN WHITE IN 1840, AND WHERE SAMUEL WHITE FIRST LIVED IN AUSTRALIA. JOHN WHITE BROUGHT MUCH OF THE MATERIAL FOR THE BUILDING WITH HIM.

Photo, by Samuel White, 1855.

27th July, 1838.

May it please your Excellency,

Sir,

I beg permission to address to you a statement of facts which I venture to hope will lead you to interfere on my behalf. Thomas Allen, an emigrant who came out to the province by virtue of the labour fund, is in possession of a large piece of the public lands, part of which he cultivates as a garden. This place is not fenced in or in any wise protected. Hence it has repeatedly happened that stock feeding on the adjacent lands have strayed on to the land occupied by Allen, and which he calls his, and that person has repeatedly claimed damages from myself and many others.

Now, Sir, I respectfully submit that a man living on the public land is no more entitled to be there than I am myself, ought not to be allowed to obstruct those who have equal claims to his own, and to use the lands from the exercise of that right; and still less that he ought to be permitted to claim damages for that which arises from his own negligence in omitting to fence. I offered twelve months ago to lend him two men and two teams to cart the material to fence the ground, but he refused this.

I think that your Excellency will see fit to make some order in this matter.

Your Excellency's
obedient servant,

JOHN WHITE.

During this time my grandfather was getting together a little flock of sheep and herd of cattle, for a stock return now before me, and headed—"Government Stock Return" for the half year ending 31st of May, 1841—Under owner's name, comes John White; No. of Sheep, 400; description of brand, I.W., near side. The cattle return for the same period was—total, 61 branded—bar over I.W. In November, 1845, a return filled in by his manager of the Avenue Range property, in the south-east, showed 1,094 cattle branded that year, and in 1849 they had more than doubled. In 1839, records show that John White made an application for purchase of land, an application form shows the No. 136: I, John White, hereby offer to purchase sections 197 and 193, and evidently the following letter applies to this:

Land Office,
10th January, 1839.

Sir,

We beg to acknowledge the receipt of your tender, No. 136, and to acquaint you, with reference thereto, that His Excellency the Resident Commissioner, has not yet come to any decision respecting the disposal of the Green Slips, but that the whole of the land described in your application had been previously tendered for by other persons. We have the honour to be,

Sir, Your most obedient servants,
GEO. STEPHENS.
GEORGE WALL.

John White eventually acquired the Green Slips in question. It must have been very difficult to satisfy every settler with the land allotment, and there is no doubt there were many heart-burnings over it. A most interesting poster is now before me, which I reproduce as it is:

LAND
OFFICE.

In order that the Grants of the Town Sections of Land, which are about to be forthwith issued, may be made out accurately, the Proprietors of such Sections, or their Agents, are requested to send me at their earliest convenience, a statement of the Christian and Surnames, places of abode, and designations of properties, in whose names they wish the Grants to be made out, and at the same time to produce to me the Land Order, Receipt or other Document, under which they claim Title to the Sections, so as to authorise the issuing of the Grants in the names which they may require, which Land Orders, Receipt, or other Document must be deposited with me in exchange for the Grants when they are delivered out.

J. H. FISHER,
Colonial Commissioner.

Adelaide, 19th August, 1837.

Printed by Robert Thomas & Co.,
Hindley Street,
Adelaide.

There were many squabbles and adjustments in these early days over the allotment of land, and under the prevailing conditions one could but expect mistakes to be made; the following letter refers to one of them:

Surveyor-General's Office,
June 8, 1839.

Sir,

In reference to your claim to a certain portion of land to which Mr. Birdseye lays a claim also, and which you stated to me to be included in the land given over to you by one of the officers of the Survey Department, I am to request that you will forward your Land Grant to me for inspection, as it will be necessary to examine it before the question can be definitely settled.

I am, Sir,
Your obedient servant,
CHAS. STURT,
Surveyor-General.

To Mr. White,
Reedbeds.

A very interesting poster has been turned up amongst my grandfather's papers, it only gives the date of the month, but we can safely presume it was printed in the year 1838; it reads as follows:

ANNIVERSARY
of the
Establishment
of
ADELAIDE.

The First Anniversary Dinner in celebration of the Sale of Town Lands will be held at the ADELAIDE TAVERN, on the 27th MARCH.

The Honorable James Hurtle Fisher in the Chair.

Stewards:

W. Light, Esq.	Edward Stephans, Esq.
John Morphett, Esq.	Thomas Gilbert, Esq.
Dr. Wright	John Brown, Esq.

Dinner will be on the table at half-past five o'clock.

Dinner Tickets, including a Bottle of Wine, Twenty Shillings each, to be had of the Stewards only.
Printed by Robert Thomas & Co., Hindley Street, Adelaide.

In 1840, Sturt was Assistant-Colonial Commissioner; this is shown by a document dated 3rd April, 1840:

Sir,

Having submitted your accounts to the Governor, and left them for His Excellency's consideration, I am instructed to inform you they have been sent to the Auditor-General to be laid before the Board now sitting for the examination of Public Accounts, and that the decision of the Board will be duly intimated to you.

I remain, Sir,

Mr. J. White,
Reedbeds.

Your obedient servant,
CHAS. STURT,
Assistant Commissioner.

Although I have a great many papers handed down from those early days, which are connected with every day names and places of the present time, it is impossible to publish the whole of them; one which is connected with a well-known public place is here given. It is headed, "In the Villa Roof:"

Gilles Arcade,
19th May, 1838.

Sir,

I will thank you to give me in writing particulars of the above material for the roof. It is in order that I may ascertain the extra expense. I wish to know what quantity of timber has been used for the roofing as far as entered up to this day, together with the expense of the labour in writing—and I will then make up my mind what I will do.

Yours most obediently,
OSMOND GILLES.

Messrs. E. & C. Catchlove,
Waymouth Street.

Now we have come to the time when John White has a comfortable home for so young a country, many acres under crop, vines and fruit trees, with flocks and herds on the pasture lands; this is in 1842. He had sent home for his family in that year, and it is thus that Samuel White and his brother made their journey to Australia; so I will leave the older pioneer's career to follow that of his eldest son's.

Photo by Samuel White, 1858. SAMUEL WHITE'S SECOND HOME AT THE REEDBEDS.

4.—THE ORNITHOLOGIST AND THE FIRST FIELD WORKER IN SOUTH AUSTRALIA

Samuel White (born at St. John's Wood, England, on Sunday morning at 4 o'clock, June 15, 1835, came to South Australia with his brother William when they were small boys in 1842; as already mentioned, their father, John White, arrived some few years before them in the Tam o'Shanter, in 1836, and had taken up country at the Reedbeds. At that time much of the property was covered in a mass of reeds and flags, outside of which was a fringe of high dense rushes and luxuriant grasses. This, combined with belts of fine timber along the river, red gum (*Eucalyptus rostrata*) and sandhills not far off, covered with pines and banksia, and out beyond that open plains and marsh land, made a rich and diversified collecting ground, which has to-day practically passed away owing to the advance of civilization. The young Whites must have been naturally fond of nature, and ornithology began to cast its spell over the elder brother, Samuel. Amidst this rich piece of country in its virgin state he had a great field for his abilities and tastes. Labour in those days was at a premium; in fact it could not be had, and the brothers, Samuel and William, were often sent to watch the cattle. This was difficult work, for the country was covered with high rushes and reeds, and it was necessary for the watchers to climb into a tree or sit upon a stump to get a good view of the surrounding country. During (what would be to some) long hours of watching, the two boys became expert bird observers, and knew the habits of the birds by heart, for they were being taught from Nature's book. Now, an employe of their father, named Lord, who was chiefly employed at blacksmithing, had a great turn for natural history. He could skin and stuff birds, and as can be imagined, the two lads were willing pupils. Whenever a chance offered they were at the blacksmith's shop. About this time the father began to notice the liking for nature developing in the two brothers, and he put a strong check on it, as he considered they wasted too much of their time, so the lads had to carry on their collecting and bird observing on the quiet. They had come into possession of a muzzle loading pistol, and this enabled them to procure more specimens, but the firearm and the specimens had to be hidden far away from the house

in a large hollow tree, a hiding place known only to themselves. The surviving brother, William, told me, that one day he was working by himself and had hung his coat on an old stump of a tree, and that a little Brown Flycatcher (*Microeca fascinans*), after his way, came making a great fuss at the unusual object of a coat, and soon this noise attracted a Flame-breasted Robin (*Littlera chrysoptera phoenicea*). William took up a stone or stick and knocked it over. The perpetrator of the deed, who is more than eighty years of age now, says he can remember as if it were yesterday how overcome by emotion he was at handling the first robin of the species, and said that day seemed as if it would never end, he was so anxious to take it to his brother, Samuel, that he might stuff it. At last this was accomplished, and the beautiful robin was added to their growing collection. This last addition had such a fascination for them that they could not help looking at it several times in the day. It may be that this raised their father's suspicions, and he at last detected the first museum in the hollow tree, and complete destruction followed. This was a sad blow, and on top of this their friend the blacksmith moved two or three miles nearer town. The lads were never daunted. The great love of so glorious a natural science had developed a brain power that could not be baulked, and on Sundays they slipped away, and cut across country to their old friend, who possessed a light gun, and after procuring a bird or two they would fetch them home, and skin them. The boys were growing up now, and their father having taken up country in the South-East, and stocked it with cattle and horses, the sons were kept busy at home or at station life. Samuel White became a very fine horseman: in fact all he undertook he mastered. During their station life the brothers had little time to indulge in their hobby. Still they managed to add here and there a specimen, and they were always observant, and the love of nature was gaining a greater and greater hold upon them. Birds that were seen every day of the week in those times are now wiped out for ever. Take for instance one bird, the Swamp Parrot (*Pezoporus terrestris*). These early ornithologists have seen the black boys, while driving cattle, dismount two or three times in a day, to devour this bird's eggs —a bird which is for ever gone from South Australia.

A SCENE ON THE TORRENS, NEAR THE OLD HOME (Looking north), SHOWING THE FIRST BRIDGE IN THE DISTANCE.
Photo, by Samuel White, 1855.

5.—THE EXPLORER.

In December, 1860, John White, the father, met his death through an accident with horses. This was the turning point in Samuel White's life, for he then became free to gratify his longing to put the whole of his time into the pursuit of ornithology and the collecting of other natural history specimens. In 1861 we find that in company with his brother William he made many short trips to such places as the Black Swamp in the south, and Wirrabara Forest in the north, and they went on a big collecting trip up the Murray River in the early part of 1863. During these trips valuable notes and observations were made, and many specimens collected. In the winter of 1863 Samuel White prepared for his first big expedition, and a great undertaking it must have been in those days. Three horses attached to a dray, with ten months' stores, constituted the outfit. The enterprising ornithologist, accompanied by his man, named Cotterel, set out from Adelaide to penetrate the vast interior, which was then unknown. By August 23rd, 1863, we know he was at St. a'Becket's Pool, lat., 28° 30′, for it was here he collected the type specimen of *Artamus melanops*. Pushing on past Lake Hope, and away to the north of Lake Eyre, taking his position each day and marking it down on a blank map; beset by privations and hardships beyond description, and attacked by hostile natives, but never daunted, he and his companion were shaping their course for the centre of the continent. One disaster after another befell them, and when, north of Lake Eyre, the last horse died, the indomitable spirit of the explorer was forced to give in. The dray, with nearly all the valuable specimens, had to be abandoned in the desert, and the two men set out on the homeward journey entailed would fill a book if told in detail, and would read like fiction; but it must suffice to say that Samuel White and servant reached home at the Reedbeds after months of tramping. This intrepid ornithologist must have had a great constitution, for we know that he was on the Murray River again in 1865, this time accompanied by his brother William, when a good many specimens were collected, both birds and insects, the brother William taking a keen interest in the study of insects

Soon after Samuel White's return with his brother William from the Murray River in 1865, he must have embarked on another expedition, this time taking a manservant, Cotterell by name, two horses, and a cart. On the latter was packed a light flat-bottom boat to enable the ornithologist to cross any estuaries or arms of the Gulfs. He seems to have shaped a course along the Gulf of St. Vincent, and passed around its head, then followed the coastline of Spencer's Gulf till a spot was reached some little distance north of Port Germein and south of Port Augusta. Here he undertook the hazardous course of crossing the Gulf, using a blanket as a makeshift sail for his little boat. Cottrell remained with the horses and cart. All went well with Samuel while on the trip over. By sailing and pulling he reached the western coastline of Spencer's Gulf. Pulling his boat out of reach of the tide he formed his camp, and soon set out to explore for birds in a new country. The feelings and expectations of this early ornithologist can only be understood by those who have set foot in an unexplored country. There is no doubt many interesting specimens were collected, but his great find was a new blue wren (*Malurus callainus*, Gould), called by the describer in the vernacular "Turquoise Superb Warbler." I cannot do better than repeat what the great ornithologist, John Gould, tells us about this bird in his folio supplement to "The Birds of Australia," Part IV., under the heading, *Malurus callainus*, Gould (Turquoise Superb Warbler) —"For the knowledge of the existence of this lovely species I am indebted to S. White, Esq., of the Reedbeds, Adelaide, who informs me that he was under the impression it was a new bird the moment he saw the first example that came under his notice. He was, therefore, induced to shoot and skin eight or ten others of both sexes, all of which, with the exception of two males, he had the misfortune to lose in crossing Spencer's Gulf. They were procured in the 'Salt Bush Scrub' about 300 or 400 miles north-west of Adelaide. Upon measuring these Mr. White found that the extent of their wings from tip to tip varied from 5½ to 6 inches, the specimen sent me being one of the smaller examples. Their habits were very similar to those of the other members of the genus, and were not characterized by any peculiarity. The males, as is usual when adorned with their nuptial dress, were very shy, and those secured by Mr. White were obtained by a kind of ruse (placing his hat on the ground and hiding himself in the bush until curiosity prompted the birds to examine the unusual object). That this gentleman may again visit the home of the species and obtain the

CRESTED PIGEON.

(*Ocyphaps lophotes*).

Drawn in Water Colours by Samuel White at the age of eighteen years.

female is my ardent wish; he should bear in mind that, the locality being maiden ground, in all probability other unknown species of birds will be found, the discovery of which will amply reward him for the trouble of research, and I have no doubt he will do so, for I have reason to believe that no one of my many correspondents in Australia is more keenly alive to the interests which attach to our favourite branch of science—ornithology."

So Gould touched lightly upon an accident which was nearly a tragedy, and the means of cutting off the life of one of Australia's greatest ornithologists. I say lightly, but that may be due to my father, for more than likely he made light of the accident when telling it to his friend, Gould. This was ever his wont when speaking of his many dangerous experiences.

So far as I know the incident alluded to happened in this way. Having dragged his boat down to the water he put his specimens, guns, and camp equipment on board, and, pushing off, set sail for the eastern side of the Gulf. He seldom spoke of this experience in after life, but those to whom he told the tale say the breeze freshened towards the afternoon, and a sudden squall struck the boat when a considerable distance off the eastern shore, the improvised sail did not clear when he let it go, and the boat capsized, all the heavy articles going to the bottom. Strange to say a small box which contained the two *Malurus* and three other skins floated close by, and it was secured. The ornithologist stuck to the boat for some time in the hope of righting her. He found this impossible, and the wind and the tide taking the boat, which was awash, further out, he divested himself of all clothing possible, secured the precious little box with the specimens, and taking one of the floor boards from the boat he made for the shore. A fearful battle for life took place, and after swimming and floating for many hours in the water Samuel White had just enough strength left to drag himself on to the dry sand where he lay unconscious for a long time. With the assistance and attention of his man he soon recovered and returned to his home at the Reedbeds by another route. The new *Malurus* was forwarded to John Gould in London. The chief object, I believe, of this trip was to discover how far north *Epthianura tricolor* and *E. aurifrons* could be found. An odd bird or two visited the Adelaide Plains in those days—always coming from and returning to the North—and this early ornithologist was anxious to discover their home and how far north and north-west their habitat extended.

6.—HE GOES FURTHER AFIELD.

In 1867 Samuel White made preparations to go further afield, and entertained the idea of proceeding high up on the Queensland coast and penetrating to the Gulf of Carpentaria, and thence down to South Australia. With this object in view, and accompanied by his brother William, he set out in a small boat bound for Sydney. There they changed into a still smaller one called the "Saxone," and during their progress up the coast to Brisbane they encountered one of those violent storms that often visit those latitudes, and were nearly wrecked. Reaching Brisbane at last they transhipped into another boat called the "Black Prince," a very small and leaky boat she was, not fit to go to sea, for large holes in her hull were stopped up by sacking dipped in tar and nailed over with pieces of packing cases. In this state she sailed up inside the Great Barrier Reef, and when a blow came on the captain had to seek shelter under one of the numerous islands till it had passed. After a very anxious time they landed at Cleveland Bay, where Townsville is now situated, but then there were only two habitations and three or four white men, one being a blacksmith who was induced to put together a pair of strong wheels, on which was constructed a body. While this was being done the White brothers were camped on the bank of a reedy creek, and had commenced their work amongst nature. The strange birds to be found in that part of Queensland interested them much. At this time the brother, William, became ill with scurvy owing to privations and want of proper food, and it affected his feet so badly that, being unable to stand, he had to keep his bed for days. It was found that they had formed their camp in the track used by many snakes on their way to the creek to water, and on many occasions the reptiles passed over the prostrate form of the invalid. Once whilst the elder brother was away a snake instead of passing through the boughs (on which the sufferer's bed was made) to the water, remained under the bed. William watched for some time, and at last saw the snake under him, and reaching for a gun (which was always left near him for his protection) shot the snake. Hearing the report his brother, Samuel, was soon on the scene wanting to know the trouble, and when the invalid explained his brother lectured him for wasting such a priceless commodity as ammunition. His brother having almost regained his

THE TRUNK OF AN AMERICAN TREE ON THE BANK OF THE TORRENS, NEAR THE OLD HOME. IT WAS HEARD TO FALL BY MR J. H. FISHER WHEN HE WAS ON WEST TERRACE.

Photo. by Samuel White, 1863.

health Samuel White purchased a roan mare to draw the rough cart, and they set out in August, 1868, to find his way to the Gulf of Carpentaria through a thick mass of tropical jungle and broken ranges, with his only guide, a map, which proved to be worse than useless.

Leaving Mount Mylor, near which Samuel White and his brother had camped, they passed out through Thornton's Gap, and followed a creek going north. This creek was dry and sandy, but during heavy rain it had overflowed and filled clay pans some little way back, and these supplied water for the

WILLIAM WHITE.

brothers and their horse. The bird life was of the greatest interest, and new species came to their hands every day. Not only birds, but seeds, plants, land shells, insects, and many other specimens were collected. Great difficulties were experienced in many places in getting their light cart over the country, and in some localities they were days making little headway. Crossing over the tableland country they struck the Burdekin River, and followed it for a long distance in a northerly direction. Holding to his original plan of making

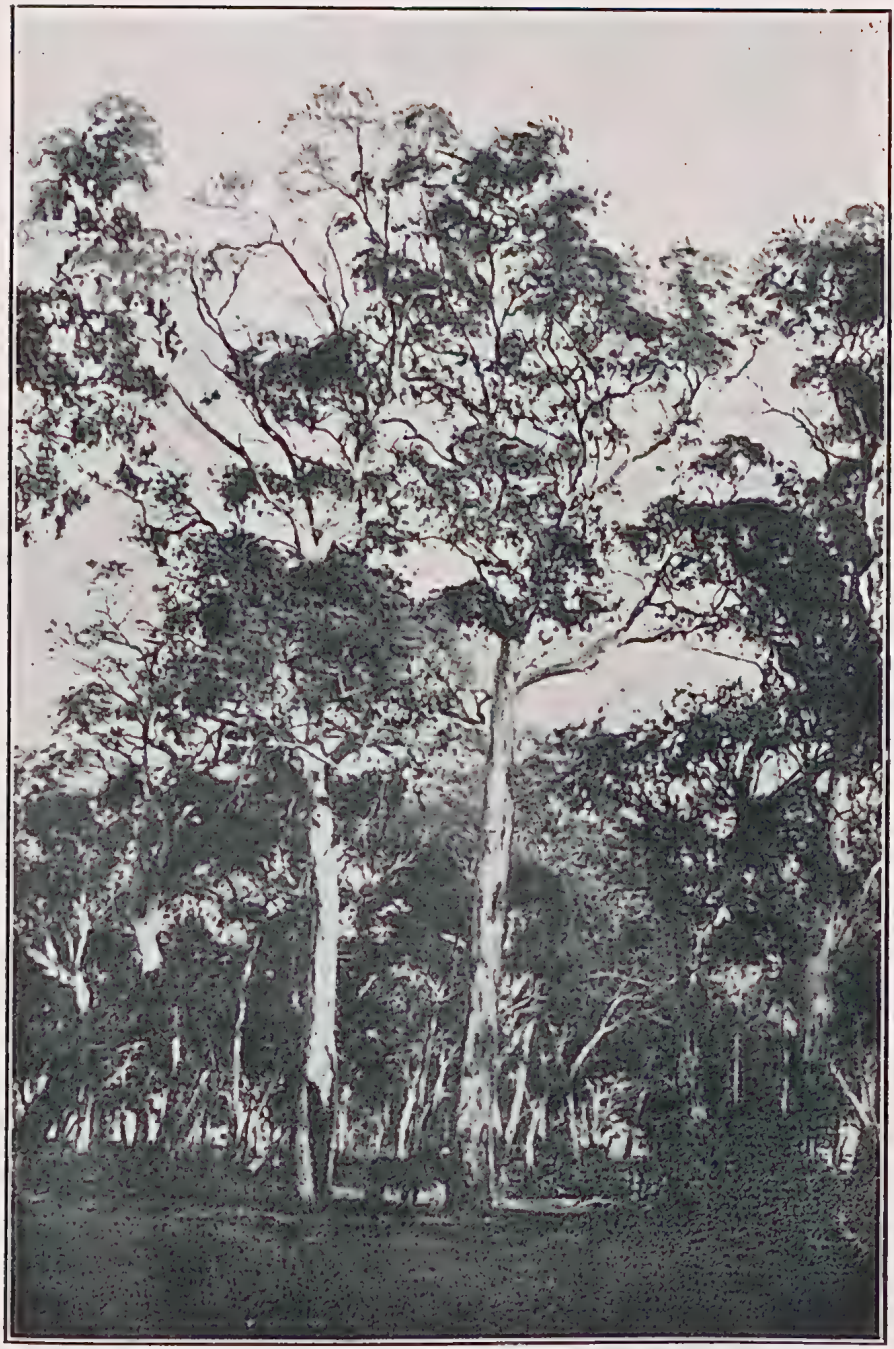
the Gulf of Carpentaria Samuel White and his brother left the Burdekin and pushing further and further into a dry country they found that water was scarcer than ever, and had almost given up hope of finding the precious fluid when they came upon a hole containing about two gallons. Unfortunately a dead kangaroo, in an advanced stage of decomposition, lay in it. The water was boiled and half given to the horse and the remainder was strained and boiled several times, the scum being taken off at each boiling.

Soon after this it became only too apparent that the two naturalists would have to turn back, and from all accounts this they most reluctantly did, making up their minds to continue down the coastal belt. Records show that they saw one of Leichhardt's marks—a large L cut deeply into a tree. The only maps available at this time were worse than useless. Watercourses were shown as having their sources in ranges marked on the maps, but the explorers found these markings to be incorrect in many cases, as no rivers were flowing anywhere near the ranges indicated. To turn back for the better watered country was easy enough, but to get there was quite a different matter. The few waters met with were drying up behind the travellers, and they had to hasten on—a difficult performance in such a rough country. One evening, after many privations and hardships, the two brothers tied up their horse to prevent it from straying and lay down, feeling sure that their end had come, for all that day the elder brother, Samuel, had searched the country around the camp for water, and although there were many likely spots none was found. Weary and sad he had more fallen than laid himself down, and neither brother spoke to the other. The stars came out one by one, and the pall of night spread itself over the land, and we can surmise that the thoughts of these two men did not widely differ from those of other explorers who have found themselves in the same difficulties. All at once a bird call sounded clear upon the night air. Samuel White raised himself upon one elbow and listened intently. He recognised the call instantly as that of the Satin Bower Bird (*Ptilonorhynchus violaceus*), and he also knew that this bird would not be far from water. Again the call was heard, a rush of wings followed, and the bird was plainly seen passing overhead. The ornithologist, by the aid of a star, marked the direction in which the bird had flown, and then with parched throat and swollen tongue he crawled out in the direction the bird had gone. After a painful search the water was found

and then the tale is told of how the brothers struggled in their weak state to keep their horse from drinking too much—a mistake which they made themselves, and which brought on dysentery. They were very ill, and had the natives come upon them in this weak state they would have been easy victims. Although ammunition was of priceless value to them they were forced to discharge a gun at intervals during the nights on which they knew that natives were following them. I do not think that it would be out of place here to allude to the saving of life by the knowledge of birds' habits. We know that this is by no means a solitary case. Only a short time ago Dr. Wm. MacGillivray, of Broken Hill, was telling me how his father's life, and that of a companion, was saved almost in the same way as the above, but in their case it was the flight of pigeons which attracted the attention of the early pioneer in Central Australia after he and his companion had given up all hope of finding water. There is no doubt many more would be added to the list of saved if they had only the knowledge of the habits of birds. The Satin Bower Bird had led Samuel White to a waterhole in a river, for which he had been searching for weeks, and he discovered it was many miles to the south of the position marked on the map. They followed the river as well as the nature of the ground would permit. Often belts of jungle could only be penetrated by cutting a passage for horse and cart, and the contour of the country often led them miles out of their course. Bird life was more plentiful here, because many large waterholes had not dried up. Many of the smaller creeks coming down from the ranges, and which were crossed by the naturalists were found to be quite dry. After some time it was found that this river was taking a turn into the hills, and that it would be necessary for them to cross it, so they searched for a crossing, but a good one could not be found. The side on which the brothers were was low and covered in a dense jungle to the very edge of the water, while the opposite bank was high and steep. Cutting a track through the sub-tropical jungle to the river they forded the horse and cart across the stream. But difficulties began on the other side. When halfway up the cart capsized, and with the horse rolled down the steep bank, where it was stopped by a fallen tree lying right across its course, and between this tree and the bank the mare became firmly wedged on her back, kicking and struggling frantically. The tree, being about two feet in diameter, dead and hard, it took the greater part of a day to cut it

through with a blunt tomahawk before the mare could be released, and she was so numbed when she rolled into the water that the travellers despaired of saving her, but she eventually recovered. The boxes, which contained specimens, stores, ammunition, guns, etc., broke open and their contents were thrown into the water. The cart had to be taken to pieces and hauled back to the place from whence it had fallen, and there put together, and while doing this one wheel fell back and the tire struck Samuel White's head, cutting a fearful gash and stunning him for a time, but directly he came to himself his indomitable spirit—which was ever shown through his life—again asserted itself, for his brother relates that although the blood streamed down the side of his face and saturated his clothes, his first remark was that he would sooner die than be beaten. It was late that night before they camped on comparatively level ground.

So the brothers battled on beset by all kinds of obstacles and privations, some days making good progress, others little or none, hacking their way for days through thick jungle, scrub and creepers, removing stones and logs out of the way to allow the horse and cart to pass. All this time collecting was going on, and most interesting and rare specimens were added to the collection. The thorny scrub and lawyer vines tore the clothing from their bodies and at last the supply of shirts gave out, so Samuel White and his brother were forced to make shift with shirts made from 50-lb. flour bags. A hole was cut in the botton through which the head was passed, a hole at each side was made to which sleeves of the same material were attached. Before reaching Brisbane, the horse and cart and many other things were disposed of and the brothers went into Brisbane to ship home the valuable collections. After a short rest, they set out once more westward. This time they had to depend on what they could carry for they intended making along the rough ranges which extended down through the country they wished to explore some little distance from the coast and it was impossible to take any kind of conveyance. Setting out one day from Brisbane the naturalists made their way into the ranges and soon found themselves in very rough country. They were the first white men to climb Mt. Lindsay. Before reaching the top, they had to pass up several bare faces of rock by means of the creeping plants that hung down. The top of the mountain is called the tea-pot on account of its shape resembling the bowl and spout of that well-known utensil. Under the mass of rock which



SOME OF THE BIG TIMBER ONCE GROWING NEAR THE OLD HOME.

Photo. by Samuel White, 1855.

resembled the spout a beautiful lake was discovered upon which there were many water-fowl including pelicans. Where the overflow found its way down the mountain side a deep channel was cut, round the opening of this channel or cavern a mass of most beautiful sub-tropical vegetation grew, beautiful flowering creepers and gigantic masses of fern, while further in ferns of more delicate and exquisite shape clung to the damp rocks. Outside some fine Castanospermum trees shed their crimson blossoms over all. The vegetation around the entrance was so thick and rank that the interior was shrouded in semi-darkness. The travellers hanging to the vines and creepers pushed their way into this huge slit in the face of the mountain and to their surprise they saw many white spots floating about in the darkness. These spots were in pairs like eyes and the mystery was not cleared up till one of the objects was captured and it was found to be a beautiful dark blue butterfly with a large white spot on each wing, the insect was such a dark shade of blue that it was not discernable in the dim light, only the white spots as they hovered around. After securing a number of these insects which must be lovers of darkness, because they would not allow the naturalists to drive them out into the light, the brothers contiued in their way. Having to ford rivers, which came in their way, which in some instances were in flood, crossing was not made without much risk to life. Many valuable notes were made each day, as well as collecting, but the latter was much restricted, as a small collection only could be carried to points where it could be forwarded. When they got down into New South Wales, the Hawkesbury River gave the travellers much trouble, because this fine river throws out innumerable arms into a very rough country, so they had to climb one rocky ridge after another to be confronted by one of these arms. It was here that the King Parrot was met with in numbers, and the brothers spent some time in observing these birds in their natural habitat. Having crossed the Hawkesbury river at last, they pushed on to Sydney, and camped a few miles from the town; a very rare moth was captured at this camp. (In 1880 I accompanied my father when he tried to locate this camping place, but found it a densely populated centre.) Having sent on their collections and having had a rest for a week, the naturalists once more set out on foot—this time Melbourne was the objective. Travelling some distance inland they soon lost the sub-tropical jungles and the animal and insect life changed with the country, their collecting soon dwindled down to a few specimens each

day. From a pastoral point of view, the country was excellent, with great stretches of open timber and beautifully grassed, and in some cases open downs. Although the naturalists admired the wonderful timber and beautiful country, they missed the prolific collecting ground amidst the sub-tropical belt, still they found much to interest them in bird life, on this journey between the capitals of New South Wales and Victoria, the overlapping of species alone was a most interesting subject. In due course Melbourne was reached and the brothers decided to take boat home, and they reached Adelaide some eighteen months from the time they had set out. The same journey in these times of rapid transport would be thought little or nothing of, but in those days it required some pluck to face it, and one needed to be a good bushman and able to put up with much privation to bring the journey to a successful termination.

In April, 1869, Samuel White married, thus securing a loving companion who shared the hardships and pleasures of many an ornithological expedition by land and sea.

7.—TWO TRIPS TO ENGLAND.

On the 14th July, 1869, he and his wife sailed for England in the "Fire Queen," and after a voyage of five months landed safely in the Old Country. Their sojourn in England proved a very happy one. A great deal of time was spent with John Gould, who gave a little dinner on one occasion in honour of the Australian ornithologist, and at this gathering many Old World bird men met my father. I have been told days and nights were spent discussing ornithological subjects, and a great and lasting friendship sprang up between the great author of "The Birds of Australia" and the greatest field ornithologist Australia has ever possessed. As a son I may be biased, but it has always been my contention that in spite of the great regard that John Gould had for my father the great author never made use of his opportunities to enlighten the scientific world with regard to the enormous amount of work my father accomplished in ornithological field work. A few scant references were the extent of acknowledgment of only a few of the many new birds discovered by Samuel White.

Samuel White with his wife, returned to South Australia in the ship "Murray," landing on July 12th, 1870, after a most eventful and trying voyage. Fearfully rough weather accompanied the vessel most of the way. Taking the route around the Cape of Good Hope, the ship went a long way south. From letters and rough notes I find that my father, in 1871, was on his way to Queensland, bent on an ornithological expedition. The records of this trip are meagre, simply a few scant notes stating that a large collection of birds and natural history specimens was taken.

In April, 1872, Samuel White again sailed for England, this time in one of the early steamships. This was a business trip in connection with estate matters, which required his presence in London. In some rough notes on the voyage, he speaks of the boat calling at Albany. "We had a great scramble to get on shore," he said, "there were few boats and the sea was running high, and the passengers and luggage were soaked by the seas. The chief hotel, which was a very poor place, was soon reached. The weather being stormy, I did not go out until after dinner. The harbour is a beautiful little basin of an inlet from the eastward. The town is scattered, and the houses small. It is one of the sleepiest places I have ever been in. In the afternoon I set out from the back

of the town proceeding for about two miles, and found the country as far as I could see, covered with scrub—it put me much in mind of the black swamps in South Australia—but the eucalypti were stringy-bark and calophila. Upon my return I visited the naturalist of the town, a Mr. Maxwell, an old man of the last century. He knew how to ask for money for the few curios he had, wanted £1 per dozen for Buprestis beetles, many species being those I already have. Returning to the hotel ended my first ramble in Western Australia.

"The land appears very poor, undulating white sand, covered with scrub, great boulders of granite cropping up in every direction. The scrub is very beautiful in itself. There is a greater variety of banksia here than I have ever seen before. Some of them have large blossoms, a foot long, others were small, but exquisitely beautiful. I did not see any birds.

"Next day, as the 'Bangalore' had not arrived, I made an excursion in the opposite direction to the route taken the previous day. Had not gone far when a magnificent calestemon was discovered in full bloom. It really looked beautiful, with its profusion of flame-coloured or orange-scarlet-blossoms. The country seemed of the same poor description. A few casuarina were seen about 20 feet high. I am told that this tree grows very tall in good soil, with straight boles four or five feet in diameter. No birds were seen, Getting wet through returned to the settlement. I find there is a brisk trade doing here in curiosities, such as cockatoos, rugs, skins, black-fellows' implements, quondong stones, anything for money without much trouble." Notes further on speak of sea-birds occasionally seen, and of many tropical birds of Ceylon, where the ship called, then he speaks of numerous kites at Aden, which were likened to our *Milvus affinus*, with a note stating that the call of both birds is similar. Passengers left the steamer at Suez in those days, and took train to Alexandria, to again board a steamer for Europe. In his notes Samuel White regrets taking the rail journey by night, for he only saw about thirty miles of the country after daylight, and speaks of a light grey bird with white tails; also of the crops of the surrounding country being taken off on camels, and square plots being flooded in for rice cultivation. He did not remain long in England, but while there, independent of his business, he spent some time with the bird men of the old country, and at the British Museum. After Samuel White returned a few years elapsed before he took another big trip, but we know that during that time, he was putting in much good ornithological work. He had always a yacht in commis

sion, and if not making trips inland with a covered van, constructed for the purpose, he was cruising amongst the islands off the Australian coastline. In these trips his wife and family accompanied him. During all this time he was building up a wonderful collection of bird skins, and a knowledge of Australian birds not yet equalled by any field worker in the world. An ardent ornithologist in those days worked alone, for he was looked upon by the average man as being deficient in intellect. There was no assistance or encouragement from scientific bodies, but for all that the subject of this sketch was so engrossed with the wonderful science of ornithology that it was his one great aim in life, an ever absorbing hobby.

In 1878 North Queensland seems to have again called Samuel White, and he set out well equipped for a lengthy sojourn in the Cape York peninsula and the surrounding islands. In a letter to his wife headed, "Somerset, September 25, 1878," he says, "I have just returned from a cruise amongst the islands in Torres Straits. I am quite well, no fever yet, though many around me have it. I have my headquarters with Mr. Jardine still, he is really one of the nicest fellows I ever met, his kindness and hospitality is unceasing. I have been able to make a cruise of about 400 miles amongst the islands lately, and hope next week to be able to get away amongst another lot of islands. . . . I have been here some time, but will not leave until after December. It is a long way to this place (about 3,000 miles), and I came too early, as the season does not begin till late in October. I want to do all I can while here." Later he goes on to say, "I have been all this day putting away and labelling my specimens procured during the last trip among the islands. I have only been away fifteen days, and brought back a fine lot of skins, mostly sea-birds. Then I have sea and land shells, crabs, botanical specimens, and a thousand and one natural history specimens. I have not the space here to describe the lovely islands we called at, where cocoanuts and bananas grow wild, and the natives are yellow-skinned and straight-haired (New Guinea tribes). The weather has been very disagreeable, always blowing a gale, heavy squalls. The excessive skinning is making my fingernails part from the flesh into which the arsenic penetrates, causing a festering sore, and I suffer great pain, but there, I should bear it cheerfully when I am getting so many rare bird skins.". . . . Of a later date still, a letter contained the following, "The weather now is very hot in the scrub, the wind has been blowing a gale ever since I have been here, never ceasing, always from the south-east. This is the south-east season,

and when the north-east trades set in, then come the birds and mosquitoes. The sand-flies here are very bad, wherever they bite me the place rises into a festering pimple. Insects never made a mark on me before. In a fortnight I will make another trip to the islands in Torres Straits. First to Moa and Bardo, where there are some shelling stations. Hope to be gone about a month, then return to Somerset. The right season is setting in now, and I hope to procure a great many bird skins, unless I am attacked by fever. Somerset is a pretty place, Mr. Jardine is sole proprietor, all other people here, principally blacks, are his servants. The scrub is very thick hereabouts, and one has to be very careful not to get lost, the first few times of entering it. I had a letter from poor Broadbent who is at Port Moresby, he has had fever very badly, but is recovering. It is trying work walking about in the hot scrub all day, attacked by green ants and hornets. The grass grows higher than a fellow's head here."

THE ELSEA.

8.—PREPARING FOR ANOTHER VOYAGE.

We are now approaching the last few months of my father's life, months full of activity and ornithological work. He returned from Cape York and New Guinea in the early part of 1879, and, on making a trial of his new steam yacht, "The Eclipse" (the machinery for which he had imported from England), he found that the steamship drew too much water for successful navigation in the shallow seas to the east of Australia. She was disposed of, and Samuel White set about the building of a new craft, and this time it was built of red gum, to resist the coral reefs. Most of the timber was sawn from trees on his estate at the Reedbeds, and he was very particular, examining every plank before it was used. It can be well understood that all his time and energy was required for the execution of this big undertaking. I will now quote an article which appeared in the daily press of April 7, 1880, the day upon which Samuel White started upon his last expedition.

Under the heading "Scientific Expedition to New Guinea," the writer says:—"Amongst the men who contribute to the fame of a new colony, but whose deeds are as unostentatious as their names, were once unfamiliar to the old world beyond the seas, are some of the sons of our old colonists, who venture forth into the unexplored regions of the interior in search of new country, and endure the most extreme hardships in their pursuit after wealth. There are few, however, who, with ample means at their command, would give up the comforts and luxuries of home life to risk unforeseen dangers and privations in the field of scientific research—the object of whose life would be the collecting and classification of specimens of the flora and fauna of the South; the gathering of shells that stud the seashore, of fossils that lie hidden in caves, or the capture of winged denizens of the air, whose brilliant plumage is a charm for ever in the eyes of the ornithologist.

"Some six miles out of Adelaide, on the road to Henley Beach, stands a handsome, well-built residence, portions of which have only recently been completed, while other parts of the homestead exhibit unmistakeable signs of age. This is the abode of the son of one of our earliest settlers, Mr. John White, who arrived in the Colony in 1836. Mr. Samuel White, possessed of ample means to live a retired life, has displayed a passion for ornithology, and in his pursuit of specimens of the feathered tribe has explored nearly every portion of the Australian Continent, and now intends to carry his investigations into a more distant region. Mr. White first commenced

his scientific travels about the year 1862, when he endeavoured to sail up the Murray River, but being baffled in this, he made his way on land, with but one companion, into the interior beyond Lake Hope. This trip took some considerable time, and the naturalist met with great difficulties in getting part of his collection within the bounds of civilization. After some minor expeditions in 1868 he traversed the greater part of Queensland, landing at Cleveland Bay, and following the River Burdekin for a few hundred miles. His brother, William, accompanied him on this trip, and suffered so much from the effects of it that he has never ventured on another. Fever, ague, encounters with the blacks, and being reduced to a state of starvation were amongst the privations these venturous ornithologists had to endure. On his return to his home Mr. Samuel White informs us that he discovered a 'fair specimen' that he captured by fairer means than by the use of his rifle—his wife, and after the wedding tour in England he made another exploring trip to Cleveland Bay, Cooktown, and Trinity Bay, and in the dense tropical forests there caught the fever, and was laid up for a considerable time. He would have died had it not been for the attention and kindness of the natives. He was taken by a Batavian steamer to the nearest point to New Guinea—Thursday Island—and after that spent some considerable time on the south coast of New Guinea, principally in the Papuan Gulf, on Yule Island up the Katow River, and often in company with the Torres Strait 'pirates.' He was quite alone, but went amongst the natives and 'pirates' with perfect immunity from harm. He describes the 'pirates' as being a most genial and hospitable set of pearlers, and says he was never better treated in his life than on the shell boats which belonged to them. During the twelve months he was on the New Guinea coast he collected about 800 bird skins, and since his return twelve months ago he has stored them away till his return from the next expedition. Unable to rest ashore, and enjoy the quiet routine of life at the Reedbeds, Mr. White has determined upon making another exploring expedition to New Guinea, and for that purpose has had constructed a schooner yacht of 80 tons, in which he will sail for his destination to-day. He will take his wife and family with him to Sydney. Two naturalists, or taxidermists, will accompany the expedition, Mr. F. W. Andrews, who is well known in this Colony, and Mr. J. Cockrell, who has collected largely in the Southern seas. A captain, chief officer, and twelve hands will compose the crew. Mr. White has named the craft the 'Elsea,' after his wife. He proposes to finish fitting out in Sydney, then to proceed with all haste up

THE WIFE OF SAMUEL WHITE.

the coast to catch the first of the south-east trade winds, proceeding inside the Barrier Reef, and touching, if time should permit, at several islands and places where rare birds are to be procured, but his chief hunting ground will be the Charles Irwin Mountains, Aru Islands, etc. He estimates that he will have to return to Sydney for stores in about twelve months, and that in two years he will gather the largest and most valuable collection of specimens ever made in the Southern seas. He has plenty of small arms, two brass four-pounder guns, one on each quarter, mounted on swivels, and a long two-pounder, which will be mounted in mid-ship, and a ton of shot on board, and will employ about eight guns in the mountains, where he expects to fall in with the rarest and choicest kinds, including birds of paradise. He will collect duplicates for purpose of exchange, and on the return to Adelaide, which may not be for four, or even five, years hence, contemplates adding new wings to his residence at the Reedbeds for the safe keeping of his specimens. Mr. White has furnished some interesting particulars of his craft:—'She is a fore and aft schooner of about 80 tons; shipwright's measurements:—length over all, 65 feet; breadth, 16 feet; with 9 feet 6 inches depth of hold; the keel is of jarrah in one piece; the planking inside and out is of red gum. . . . The seas to traverse will be difficult and dangerous to navigate, hence the unusual strength of the craft. The scantling is quite heavy enough for a 500-ton ship, and you will perceive I have done away with the usual mode of fastening with trenails, and used copper instead, which is stronger and more durable. There are over two tons of pure copper and nearly the same of yellow metal distributed about the hull. . . . Be her sailing qualities what they may, I must take the responsibility upon myself, as I consulted my own ideas as to my requirements, and modelled and drafted the work myself. The hull was completed and launched on the 14th of February, and named the Elsea, after my wife, who accompanies me as far as Sydney, and to whom I am greatly indebted for much valuable assistance in preparing for my voyage.'

"The Elsea sailed from Port Adelaide on Sunday last, and has since been lying off Henley Beach, taking in baggage, etc. Mr. White intends sailing this evening, or by daylight on Thursday, and we can only wish him and his family *bon voyage*. We need add nothing more than good wishes for health and success of an enthusiastic scientist, who assures us seriously that all the hardships of a disastrous trip and six months' illness with fever were compensated for by the discovery of a new species of butterfly."

9.—STARTING ON THE LAST VOYAGE.

So at noon, Friday, April 9th, 1880, the anchor was weighed, and Samuel White started upon his last voyage.

It is now my intention to try and narrate the principal happenings of this voyage, from memory and from notes, also from the few scanty notes of my father now available.

We drove to Henley Beach about 10 p.m. on the evening of the 8th, and after some delay the yacht's boat took us on board. The decks were so hampered with luggage, gear, stores, &c., that it was impossible to make a start that night. All the next morning was taken up stowing away things and clearing up the decks. About mid-day the "Elsea" started down the Gulf with a very light breeze, which freshened, and later on blew strongly from the S.E. Standing on the one tack we fetched into American Beach, and dropped anchor about midnight in four fathoms of water. A south-easterly breeze blew strongly all next day, so the little ship remained at anchor, and my father took his wife and family ashore in the small boat, and we all enjoyed ourselves after being very seasick the night before. Most of the day was spent searching for shells along the beach, and amongst those collected was a fine pair of paper *Nautilus*. In the evening my father rowed us off to the ship again for another night's roll. We lay about 2½ miles off shore, and a good big swell came into the bay from the eastward. Next day, being Sunday, 11th, and the wind blowing very strongly from the S.E., the "Elsea" lay at anchor, and we spent the day on shore, my father collecting specimens and taking notes of sea birds in the vicinity of the beach, all going on board again in the evening. Next morning, under main and stay sails, we ran in shore within half a mile. The crew then manned the two big boats, and got off a quantity of wood and water, and while this was in progress my father took my brother and sister and myself in a small boat, which he called the "Duck Boat," along the coastline for about five miles in search of *Nautilus* shells, but we had no success.

On Tuesday, 13th, about noon sail was set for Antechamber Bay, and we beat round with a light wind, coming to anchor after dark in five fathoms of water, the schooner rolling terrifically on a big swell. All were glad to get away next morning, after rolling about most unpleasantly all night. With only a light and variable wind we were some time

SHRIKE TIT

(*Falcunculus flavigulus*).

Drawn in Water Colours by Samuel White at the age of eighteen years.

making out against a heavy swell. During the afternoon we passed the Pages, where we spoke the "Orient" top-sail schooner, bound for Port Adelaide. The 15th found our little craft plunging into a big head sea, but during the day the wind went round to the north, and the sea went down.

Flying around us were great numbers of sea birds—several species of petrels and albatross, and we hooked a number of large baracoota. Early in the morning we were off Cape Shank. The night set in cold, with driving showers, which became heavier towards midnight, accompanied by thunder and lightning, and we were under double reefed main-sail all night. The little craft was like a duck, and kept wonderfully dry considering the big seas that were running. Just after dark we spoke to the schooner "Lady St. Aubyn," bound for Port Adelaide, and soon afterwards passed Cape Northumberland. The next day (the 16th) we passed Portland Bay, and we again took a great many baracoota. These voracious fish are caught by fastening a piece of wood or coloured rag just above the bare hook, and towing the line astern. When travelling at five to seven knots the fish are invariably caught if any are about. They seem much better flavoured if put in salt and water for 24 hours. Baracoota is rather dry and solid, has few bones, and is moderately well flavoured.

By Saturday, the 17th, we were off Cape Otway, with numbers of sea birds in attendance. The wind blew nice and fresh for a while, but later died out to a calm, and only two or three baracoota were caught during the day—the pace of the craft being too slow. Often when these large fish were hauled in sea birds chased them, screaming frantically. For the next two days (19th and 20th) the wind was exceedingly light, variable, and baffling. We were off Wilson's Promontory at 2 p.m. on the 20th. Very rough weather, with strong head winds and high seas were experienced on the 22nd and 23rd, and on the 24th we beat past Gabo Island. The wind went down, but the seas were very high, and the sails and gear were very much chafed with the rolling of the vessel. On the 25th it was very wet, heavy rain falling all day and night. Next day was the best run we had since being out, and we did over 90 miles, but when 25 miles off Sydney Heads the wind died away. Several other craft were in company with us. On the 27th we entered Port Jackson. We first dropped anchor in Elizabeth Bay, to send all the powder and some of the arms up to the magazine. Next day we beat up to Lavender Bay, where we lay several days

while Samuel White secured a house for his wife and family, and having selected one at Double Bay the yacht was shifted around there, where she lay at anchor until the 15th of May.

My father's first troubles with the master and crew started here, for they became mixed up in a drunken brawl on shore, which hurried the departure. Having shipped a quantity of stores and re-shipped the powder and arms, at 8 a.m. on the 16th of May, 1880, the "Elsea" sailed out of Sydney Harbour, with a light wind from the S.W. The wind continued very light and baffling till the night of the 18th, when a run of 90 miles was made, then light, variable winds and very strong currents were met with. On Monday, 24th, the end of McPherson Range was passed. The country looked exceedingly rugged and broken, Mount Warning looking like a pointed cone above the rest. Later on in the day the end of Stradbroke Island came in sight. The vessel was close enough to the coast for us to see that it was well wooded, and that there was a lighthouse on the rising ground at Point Danger. On the 25th the wind kept steady till daylight, when it fell to a dead calm, and at 2 p.m. the yacht was abreast of Moreton Island. At sunset the sky became overcast, and a series of squalls broke over the craft from the N. by W. About midnight a tremendous squall came up from the W., which lasted several hours, with heavy rain, thunder and lightning. For a time everything was lowered on deck, but after a while the crew got the vessel under double reef, the little ship behaving wonderfully well under the severe blow. The next day (the 27th) the wind continued strong, blowing very hard at times. The owner of the ship put in a lot of time that day with carpenter's work, for the rolling of the ship the day before upset everything. The storeroom doors and the bulkheads were smashed in, and things were generally tossed about. The master made a complaint about the binnacle light, and a change was made from oil to kerosine, with great success.

Sandy Cape was rounded before daylight of May 28. The wind during the night had been light, and very little headway had been made. A little after sunrise Lady Elliots Island was abeam of the vessel, and soon afterwards the wind dropped. At 2 p.m. the yacht was rolling about in a dead calm. Very soon a great many sharks put in an appearance, and came quite close to the sides of the yacht. They sailed round lazily, but would not take a piece of beef which baited a hook for them. It was interesting to watch such a number of these blunt-nosed huge creatures swimming about, with

several sucking fish attached to the body of each monster, hanging on to every part—above, beneath, and on the fins. The sharks appeared not to take the slightest notice of them. The suckers attach themselves by their heads, which are provided with a broad, flat top, and a flexible rim, which acts in the same manner as a piece of wet leather when applied to a wet surface. When the sucker attaches itself to the upper surface of the shark the backs of the two fish are presented to each other, and the light under surface of the sucker gleams in the water against the dark background formed by the upper surface of the shark. One or two sucking fish were caught with hooks, and measured from 18 to 24 inches in length. Several sharks were struck with harpoons, and they were seen swimming about with great white gashes in their bodies where the iron had struck them, but seemed to take little heed of it. The wind kept very light for the next forty-eight hours, there being just a light air from the N, which enabled the craft to dodge on a little, although she was close up to it.

At noon on the 29th Bustard Head lay right abeam. The sun was beginning to make itself felt as a gentle reminder that the tropics were being approached. The light breeze died away again, and the vessel was becalmed till the afternoon of the 30th, when a light breeze sprang up from the N.E., and later freshened considerably. The captain fastened on to a porpoise, and he was hauled on board. Several sea snakes about five feet long were seen during the morning, and also a very large turtle. During the night the wind died away again, but at daylight next morning it came up from the S.

The nights had been clear and cold, with heavy dews, and the mornings cloudy. By the evening of the 31st the yacht was off Cape Clinton, and the breeze keeping up all night, by daylight the next morning we were among the Cumberland Islands. The wind shifted backwards and forwards from the S. to the S.E., but blew fresh, the weather being typical for the winter in the South Tropics. The sky was overcast and gloomy all day, and the sea dark and angry looking—this was the first of the trade winds' influence. The vessel threaded her way all day among the islands, at first through the Percy Islands, and then others. They were desolate looking places; some mere rocks jutting out of the sea, with many sea birds upon them, bearing an inhospitable and barren appearance, and seemingly of an ironstone formation, without timber of any description, but during the afternoon they improved in appearance, and some looked green on the slopes,

and it was noticeable that some of the gullies were timbered with pines (*Araucaria*). Later we noticed that dense vegetation of pines and other trees covered the sides of the gullies nearly to the top, and that the islands bore a volcanic appearance. At sundown the yacht, under the orders of the owner, brought up under an island—one of the Cumberland, marked "M Island" on the chart—in five fathoms of water over a sandy bottom, where she lay fairly quietly, it being an inlet on the western side of the island. There was no time to go ashore that night, and next morning the wind blowing strongly made the anchorage unsafe, so there was no alternative but to get under weigh again. During the night it was seen that the scrub and grass on the island was burning in several places, which clearly indicated that there were natives upon it. After getting away at daylight the captain made some mistake in his bearings, and ran into Repulse Bay, but, discovering his mistake in time, hauled to the wind, and weathered Cape Conway. At 2 p.m. we passed the lighthouse and Dent Island, and as two natives came off in a canoe the captain sent a slip to the light keeper to report the boat. After passing the light a course was made around Whitsunday Island, to a nook on the N. side, where Samuel White landed three guns, and went into the scrub, but he was much disappointed, for they saw nothing to collect. Some of the crew landed, and tried out some oil from the blubber of a porpoise which had been harpooned a few days previously. It was late before the men came off, and in the meantime several natives had come on board with some fish, which were gladly purchased, and made a welcome change to the menu. During the evening some of the crew busied themselves fishing, and caught a few very nice fish of several species, some like the red schnapper found in the vicinity of Kangaroo Island, S.A. Whitsunday Island is a large one, situated near the mainland, and divided from it by a passage of a few miles. This, like all the islands around it, was of exceeding beauty—like fairylands opening out on every side. Some presented green, grassy slopes, with wooded gullies, pine-clad hills, clothed with *Araucaria cunninghamii* to the top, and others little sandy beaches, with small flats at the back, over which are scattered beautiful green ornamental trees, like a park. Others again were thickly clothed with jungle and palms. The landing place at Whitsunday Island was very picturesque. After running through a narrow passage between two islands for about two or three miles a sandy beach was seen, and Samuel White gave orders

to bring the yacht up, and the anchor was dropped in four fathoms of water, smooth as a lagoon, over a bottom of soft ooze. A landing was made upon a small patch of sandy beach, near a rocky gorge, up which Samuel White and his collectors scrambled for about a mile. On either hand stood points of land or elevated knolls, thickly covered in pines (*Araucaria*), with here and there a slope of golden-green grass, which, from the ship, looked most charming, but on reaching it we found it to be steep and stony, the grass, although green, long and coarse. The place was very bare of bird life, all that were seen were fruit pigeons, pittas, *Colluricincla*, *Rhipidura*, *campephaga*, and *Sericornis*. Next morning at daylight this most energetic ornithologist landed again with his collectors, and in his notes he says: "This morning at daylight three of us landed with guns, and proceeded up the stony gorge to the top of the island, but saw little in bird life. One of my collectors procured a fine White Goshawk, and two other small birds were taken. I found two species of *Helix*, one about the size of a large marble, marked with light and dark rings, and a small one, which I found attached to the under surface of leaves. We were on board and under weigh again before noon, and the birds collected were preserved. With a strong breeze Port Denison was passed at 2 p.m. We are fairly in the trades now; the weather is not cloudy, but hazy." The yacht was kept under weigh all night, owing to the coast being fairly clear of islands. At eight o'clock Cape Bowling Green was passed, and at four in the morning Cleveland Light; at 2 p.m. the south end of Hinchinbrook Island was abeam. In Samuel White's notes under June 4th he says: "I expect to be at the Barnard Islands early to-morrow; the run yesterday was 157 miles. It is rather remarkable we passed through the Whitsunday Passages on the 111th anniversary of Cook's discovery, he having passed through it on the 3rd of June, 1769. Navigation is much simplified since Cook's time; there are now soundings in every direction, with lights on every dangerous or convenient point. To-day I made up a lot of cartridges, ready for operations on the Barnard Islands, where I expect to find the beautiful and rare rifle bird (*Ptiloris victoriae*)."

Dunk Island was reached on the 4th, but it was after 11 p.m. before the N.W. side was reached, owing to the wind dying right away. Anchor was dropped under a big rock at the N.W. side of Dunk Island, where the *Elsca* rolled about till four o'clock next morning, when she was under weigh again, with the Barnard Islands in sight. The wind

freshened, and the islands were made about eight o'clock, but an anchorage was not reached till after 10 a.m., owing to sailing around two or three times, so as to pick up a smooth one, and it was at last decided that the north-west corner of the middle island, where it was moderately smooth, would answer the best for landing.

10.—THE BARNARD ISLANDS.

As soon as possible after the yacht came to anchor, a boat was put off, and Samuel White with two of his collectors landed on the eastern island, and to the ornithologists' great delight, they secured several rifle birds (*Ptiloris paradisea victoriae*) all in good plumage. One can understand the keen delight these lovely birds gave my father, especially to capture them in their natural habitat. The collectors came off to the vessel at sunset, and the owner gave orders to lay at anchor for a few days. Samuel White in his notes says, "The island I was on was a small one about half a mile long, very scrubby, from the sea to top, and thickly matted with vines, and almost impregnable in places. The birds were few, there being but three or four species, the rifle birds were moderately numerous for that family of birds on such a small island. The whole island was scratched over by megapodes, consequently there were no land shells seen. I saw several large logs of cedar lying on the beach. The weather was very unpleasant. Squalls of rain began after dark last night, and continued all day."

The next day Samuel White remained on board, and served out the week's stores, and skinned a dozen or more birds. Some of the crew went on shore. The collectors landed on one of the islands, but came off at midday without having secured anything. They went off again in the afternoon and returned after dark with only one bird between them and complained most bitterly of the roughness of the place. In his notes under the heading of June 7th, 1880, Samuel White says, "This morning three of us landed on separate islands, I went on No. 1, and secured five birds, Messrs. Cockerell and Andrews only procured one each off the two main islands. We returned in the afternoon, and went out again, but got nothing. This is our last day here. We have worked all the islands, and I have secured some good skins for my collection. The Barnard Islands lay in a line off shore in a direction a little N. of E. The middle island is the smallest. All three are very steep on the sides and stony, and covered to the top with small timber of various kinds, including Castanospermum, and other trees with dense undergrowth all matted together with vines and 'Lawyers.' In some places I saw the tree hibiscus with large yellow flowers, cabbage palms pandanus, and some fine specimens of native

banana. The leaves of this plant would measure two feet broad, and ten to fifteen feet long. On the South side of No. 1 island I found a nice spring of fresh water with a kind of couch grass growing around it. This Spring appeared to me to be permanent. The soil seems to be a clay of a dark red or grey brown, which turns up in small nodules as the megapodes scratch it about. Although all three islands are covered in a dense mass of vegetation, the fauna was meagre, the scrubs were dark and noiseless, with the exception of the occasional call of a megapode, the rifle bird being the only thing that was attractive to me. Of butterflies I only saw two species, and few of those, land shells and beetles I saw none, a few dead marine shells were collected with a few crabs. The Barnard Islands were places I had long wished to see, and my visit has been a successful one, for I have secured some splendid specimens of the rare rifle bird. The master had the men bringing off firewood this afternoon, and we are ready for a start in the morning. The weather to-day, although cloudy, was free from rain." After having been at anchor for three days under the small middle island in six fathoms of water over sand and mud the yacht was got under way again at an early hour on the morning of the 8th, with a light wind which soon freshened, and by two p.m. the vessel was between Cape Grafton and Fitzroy Island. One of the collectors, Mr. Andrews, was very unwell from the effects of fatigue and exposure on the Barnard Islands, the work from all appearances seemed too much for him. At this stage Samuel White makes the following note, "I am now sorry that I brought Andrews. None but very hardy men are fit for this work, some of the crew are complaining." When passing Cape Grafton several natives were seen running along the beach, and their camp fires were plainly seen. A few minutes before sunset the yacht brought up on the N.W. side of Double Island. Samuel White took a boat, and pulled on to the island to the S.W. where there was a sand spit. Many sea birds were seen, and *Ptilotis versicolor* heard, but it was too dark to do any collecting, and it was long after dark before he returned. The land passed during the day appeared mountainous, wild, and rugged, thinly timbered, and very rocky, rocks or bare earth appeared in every direction, the whole country bore a cheerless and inhospitable appearance. Upon passing Fitzroy Island to the West a nice sandy bay appeared on the N. side well sheltered from the S.E. "trades." The island is of considerable extent, very stony, and but lightly wooded. After passing Fitzroy Island, Green Island

appeared on the starboard side—a low sandy islet of coral formation, covered with bush and a few small trees. Here the Torres straits pigeons assemble in the breeding season (which is about November) in vast flocks until the whole island is a mass of white birds, and a stick thrown amongst them cannot fail to bring down several. The flesh of this pigeon is good food, but not equal in delicacy to the ground pigeon. The Torres Straits pigeon is a fruit eater, living in the trees, and never descending to the ground Next morning before dawn the yacht was under way again with a light wind, and soon after daylight the curious and remarkable peak which attracted the attention of Capt. Cook over a hundred years ago, at about the same time of the year, which he named the "Peter Bottle," came into sight with a coil of mist around its neck. The wind continued light. At 10 a.m. Cape Tribulation showed up, and a large steamer passed (one of the Dutch boats) and the officers seemingly knew the yacht for they waved their caps for some time. It was hoped that Cook Town would have been reached before dark, but this was impossible for there were 50 miles to go, and the wind was very light. The weather was beautiful and fine with the wind very light. Later on the wind freshened, so Cook Town was made that evening. The anchorage was not picked up very easily, so a pilot came out and boarded the yacht, and brought her up to her moorings. Next morning when daylight broke it was found the yacht was brought up near the powder magazine under the hill. The tradespeople brought off fresh stores, and Samuel White went on shore to see the customs, pay for pilot, etc. In his notes he says: "I was not interested in the town, where I saw a number of Chinamen, and was told they made good citizens, and that I could procure Chinese labour for 20/ per month. Although I wanted six more men I did not venture to fill up with Chinamen, for I wanted collectors, and according to my experience of the mongolian race they are too meek and averse to shedding blood to make good collectors, and seem to lack the savage pleasure of hunting and taking life which is so strongly shown in the "Britisher." The country about Cook Town at the time was hilly, forest country, in places coarse grass was growing, and many of the deep gullies further inland were filled with dense dark scrub. The country along the sealine improved as one proceeded to Trinity Bay. The hills were clothed in dense green vegetation. The harbour of Cook Town is well situated when once a vessel is over the bar, but here the water shoals to one fathom at low water

but at high-water there is about 20 ft. on it. Where the yacht lay at anchor there were two fathoms over mud. Telegrams having been sent, and answers received, Samuel White went on board, and next morning about 6.30 the Elsea was under weigh again, some delay having been caused through fouling the moorings when the anchor was heaved. The pilot came on board, and with a strong breeze the yacht was soon out of his jurisdiction. After weathering Cape Bedford, the vessel was eased off, and at 2 p.m. had passed Lizard Island and stood over to the Howick Group. The wind was very fresh from S. of E., and No. 3 Island of the Howick Group was reached half an hour before sunset; the anchor was dropped in seven fathoms of water when the vessel lay moderately still.

Samuel White had a boat lowered, and accompanied by Messrs. Cockerell and Andrews, landed on the N.W. end of the island, which lies low and sandy. There was little to collect, and by dark the two collectors had not secured a thing, while their chief had secured half a dozen honey eaters. They were mostly *Ptilotis versicolor*. They were procured in a broad leaved bush which was growing very thickly on the extreme N.W. end of the island. Next day, the 12th, sail was again made at an early hour, but the wind was not so good as on the previous day, and only 90 miles were made. At noon Flinders Group was passed, and just then there arose a dense cloud of mist or smoke, and Samuel White remarking upon it in his notes, says:—"The officers thought it was dust and that they smelt dust, but it appeared to me like smoke; however, they, fearing a 'buster,' lowered the topsails and stood by for a general take in. Soon an unmistakable smell of smoke and pieces of ashes dispelled the delusion, when up went the topsails again. Towards mid-day, the wind freshened, and we are in hopes of reaching No. 1 Clermond Island to-night where I intend staying to visit the great Egret's rookeries. The wind has been a good deal easterly which has caused us to jibe several times. At 2 p.m. to-day I reckon we are about 15 miles from No. 1 Island." Just before sunset the island was reached, and the yacht brought up in eight fathoms over sand and mud, about the fifth of a mile from the shore. A boat was swung out, and Samuel White was pulled ashore, landing on a sand bank on the N.W. corner of the island. Between this and the high land lay a broad flat the whole length of the island, covered at high water, and on which grew mangrove trees in large and thick masses, their roots intertwining into great impenetrable

barriers. The mangrove tree when growing singly presents the appearance of growing, or standing on numerous legs like a gigantic spider, but when growing in thick belts, the trees appear to be standing on a vast bed of brushwood to which are attached thousands of oysters and other shell-fish, and underneath crawl a variety of crustaceae over mud that would in places sink a man to the middle in black stinking ooze. Overhead, in the tall mangroves (some up to forty feet in height) large rookeries of Ibis Spoon-bill Cranes and Egrets, with their families in all stages were seen, producing a deafening clatter, and babel of voices which varied from the harsh croak of the adult bird to the faint squeak of the featherless "squab." Their rough nests composed of sticks were stuck about carelessly in every direction, and the repulsive looking slimy excreta which covered every leaf and branch could be smelt a mile away to leeward. It was noticed that each species had its own rookery separate from the others, with here and there a colony of flying foxes which kept up an incessant chattering and squeaking—a noise something between the chattering of a monkey and the harsh squeak of an opossum. They hung in hundreds to the branches by their hind claws, with their heads downwards, and snapped at each other. These animals have a repulsive appearance and disagreeable odour in their fur; they live entirely upon fruit and vegetable diet, and to those who are not prejudiced against them they form an excellent article of food, they are in fact, delicious. The flesh is white, tender, and exceedingly fat; the carcase would weigh several pounds, with a stretch of wing up to four feet. Little more could be done than to look around for darkness came on, and the wind began to rise, so the party went on board again.

11.—ALONG THE QUEENSLAND COAST.

Soon after sunrise on Monday, June 14th, 1880, Samuel White landed three guns and a party of the crew went on shore to cut wood. The collectors went through the thick mangroves, and explored amongst the large rookeries of both birds and beasts. Some beautiful specimens were taken of the Black-billed spoonbill (*Spatherodia regia*). Cockerell collected several other birds, and Andrews confined his researches to the vicinity of the boat where he secured a *ptilotis* or two. A fine clutch of white-headed Sea-Eagle's eggs were taken. At 11.30 all went on board with the last boat-load of wood, and made sail at noon. The wind kept very light and it was sunset before another of the Cleremont group was reached, and the anchor was let go in nine fathoms over hard sand and mud. Samuel White with one collector landed at once. A large flight of the beautiful white-shafted Ternlet (*Sternula albifrons placens*) was seen on the sandy spit, and some specimens secured. Darkness set in quickly and the boat put off to the yacht. Next morning before sunrise the vessel was under weigh, with a light but steady wind. About 10 a.m. the second lightship was passed (one having been passed the day before) and soon afterwards a large steamer bound South. All the birds procured at the last stopping place were skinned and cured, and just before sunset the yacht brought up under Cape Weymouth in four fathoms over sand. Samuel White landed and went into the scrub, but did not procure anything. Next morning just as the anchor was off the bottom line, native canoes came off. They had a little Tortoise shell to dispose of, and a variety of small things were bartered for seven thin pieces. The canoe was different to those found further South, it was a "dug-out" about 18 feet long, and about 18 in. wide, with outriggers on either side. Those seen further South were about 10 or 12 feet long, by about 2 feet six inches wide, and two feet deep, and were made of bark about a quarter of an inch thick, very tough and sewn together with fine rattan. They were sharp at both ends, and strengthened with small saplings, and were propelled by short, broad paddles. In a note my father says: "About ten o'clock to-day we passed a low, sandy island to leeward, when we saw the schooner 'Rover' lying at anchor, and I made out one of my old friends and

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acquaintances, one of the Torres Straits pirates, Captain Hovel." By noon the yacht passed Cape Grenville, then a course was steered for Hanabal Island. At 3 p.m. "Bird" Island was passed, and at 5 p.m. we made for Hanabal Island, bringing up in 7 fathoms. A boat was lowered and Samuel White with one collector landed, and found that the island was very small and scrubby, nothing of note being found, and only a few sea-birds were taken. On 16th at daylight the yacht was on her way, after passing Charing Cross Island. A top-sail schooner was sighted beating South, and then the *S.S. Corea* going in the same direction.At 3.30 p.m. anchor was dropped in Albany Passage. Notes made by my father on the day read:—

"We dropped anchor opposite the home of my old friend Jardine, and close to his yacht, and went on shore to see him, and received a warm welcome." The weather was very fine, but inclined to be hazy in the morning. The crew were very busy all day on the 17th getting water on board. Samuel White busied himself getting butterfly nets fixed up, and putting collecting gear in order. The weather was fine, but the swell made the craft roll.

The 18th was a very busy day with all on board. Some of the crew left the yacht at an early hour to cut firewood on shore, another section took the big boat on shore, and beached it for repairs, it having been damaged during rough weather. Samuel White in his notes under the above date says. "The men washed up all their clothes today. Cockerell made some tan from Mangrove bark, and tanned all his clothes, shirts, hats and everything else. He also tanned some things for me, which makes them more desirable and less conspicuous when collecting. The fishing net was treated in the same way. I was up with Mr. Jardine and had a long chat with him. It is always a pleasure to me to engage in a conversation with that gentleman, for I look upon him as being a man of good sense, and much practical experience. The weather is squally, with light showers of rain, just the weather I experienced here the year before last." The next day while the crew cleared up the ship Samuel White with one of his taxidermists cleared and straightened up the specimen room, packing up some of the bird skins, and in his notes he says. "I packed a number of bird skins such as Ospreys, Cranes, Egrets, etc., into seven boxes and sent some of the men on shore with these to Mr. Jardine's house to remain there till my return. My old friend came off to my boat with me and we spent a pleasant evening together." Early Sun-

day morning, the 20th, some of the crew went on shore and brought off the big boat, and letters were left for the next mail going South. The anchor was heaved and with a light breeze the yacht stood on her way. The wind kept light all day, and little progress was made. We passed through Endeavour Straits, and reached Booby Island an hour before sunset, and the anchor was dropped in 4 fathoms over coral. A boat was lowered at once and Samuel White landed, and in his notes he says:—

"Booby Island is too small to afford much shelter. It is a granite rock which rises out of the sea almost perpendicularly, indeed it is nothing more than a big rock, it is not more than a quarter of an eighty acre section composed of red and white volcano stone, with a few bushes growing in some of the crevices. It was difficult to ascend and is entirely bare of earth; the look of the place is inhospitable, barren and cheerless as can well be imagined, and I was much surprised to find a number of baldcoots (*Porhyrio*) on the top. These birds are usually found on sodjy banks of fresh water rivers, reed-beds, or swamps, but here they were running about on a bare rock without any appearance of fresh water, but upon walking over the island I discovered several small holes in the rock near the top of the island, which were filled to the brim with beautifully fresh and cool water. I believe the holes were permanent, as they were of considerable depth, like wells in the rock. This is where the above mentioned birds watered."

Booby Island is celebrated as having been at one time a refuge or depot for ship-wrecked mariners. In a cave on the north side the Government stored quantities of provisions and medicines for the ship-wrecked. Letters were also left there by passing ships in those days, to be conveyed south by warships, which called regularly for the purpose. In this cave there are still remains of stores, heaps of cask hoops and staves, tin cans which fell to pieces as soon as touched, the names of many callers are marked upon the walls of the cave. This depot is rendered unnecessary now owing to the settlement on Thursday Island, which is one of the Prince of Wales group. During the night the yacht touched the bottom several times, at first very lightly, but later the tide having risen considerably swung the schooner on to a lump of coral. As soon as the anchor was heaved upon she cleared and was soon under way. The wind was very light up to 2 o'clock, when it freshened, and a good run was made.

The following night was beautifully clear and wind fresh, so that up to noon the next day the little vessel made 180 miles.

A good big sea was met with which was not expected in this shallow region. This part of the voyage seemed very monotonous after the beautiful and varied scenery of the Barrier Passage. This was the second day without seeing land. The weather became cloudy more or less both night and day. During the night of the 22nd the water shallowed suddenly and upon sounding it was found that the water was only 4 fathoms and even by the dim night-light looked white and muddy. The captain altered the course from N.W. to S.W. and the water soon deepened. It was surmised that the vessel was close to Frederic Henry's Island, but although the night was not dark and the moon shone out at times, no trace of land could be seen. All day a good breeze was blowing, and a good headway was made, and the Aru Islands were expected to be in sight the next day. As soon as the yacht left Booby Island she was attended by numerous birds, Terns, Gulls, Noddies, and Gannets, two of the latter following the vessel for a long time, making attempts to alight on deck or spars. In his notes my father says:—

"Just after sunset the man at the wheel struck one of the gannets which was attempting to alight upon his head. I was standing close up, the bird rolled over and made off uttering a loud hoarse croaking noise, and we saw him no more. His mate sailed round a few times and rested on the weather end of the square sail yard, and as there was another sail set above it the bird was safe, as a man could not reach the end of the yard while the sail was set. All the efforts of some of the crew who exerted themselves failed to drive the bird off. They shook the braces, and pelted him with coal and although several pieces struck him, he refused to quit the yards. While bracing the yard the bird was knocked off by the flapping of the sails, but he managed to regain his place, and when I went below, was sitting with his head under his wing. When I returned to the deck, in the midnight watch, he was comfortably perched on the main cross-trees, while the ship was rolling and sails flapping. At 6 a.m. I found the bird with his legs tied. One of the crew had gone aloft and captured him while asleep. I gave him his liberty, and in return for my kindness he bit my finger severely.

12.—THE ARU ISLANDS.

My father was now approaching that wonderful collection of islands which are situated between the Australian and New Guinea coasts. I say wonderful islands because they are the home of the Great Bird of Paradise, the King Bird of Paradise, as well as other interesting forms. So it can be well understood with what great expectations my father was looking forward to the next few months collecting, yet in his notes of June 23rd, he fore-shadows trouble, when he writes. "Both my taxidermists are laid up with bad feet, considering the little work they have done on the few islands we touched at, coming up the coast, I am afraid they will not stand the hard work in the tropical islands we are bound for." During the morning of June 23rd, the water was very white and muddy-looking, although ten or twelve fathoms deep, but it gradually became clearer and by noon was of a deep dark blue. The weather had been very cloudy all day, with the wind strong from the East. During the afternoon it suddenly shifted to the North, and heavy clouds with rain came over from the New Guinea Coast. Under the above date Samuel White writes: "I came on deck at midnight, and observed an eclipse of the moon, the shadow soon passed off, and the officer on watch told me it had been a total eclipse." Next day the wind was light, and at midday the Captain discovered that he was twenty or thirty miles to the southward of the Aru Islands. Thereupon he bore up, and on a course due North, and at 4 p.m. land was seen right-ahead.

The same evening after dark the yacht brought up in 8 or 9 fathoms under the Island of Tragan. Native fires were visible on shore. Next morning (the 25th) the vessel was under weigh at sunrise, and was steered North along the coast. A sharp look out was kept for a channel mentioned by Wallace as "Kobror." After twenty-five miles had been covered, shoal waters drove the yacht out to sea for about five miles, and the channel was not seen till after it was passed. Anyway the water was too shallow to allow the boat to enter, so the course was continued for a few miles, then she was luffed in shore, and brought up in two and a half fathoms. It was a little after noon, and the vessel hardly swung round upon her anchor, when a canoe full of natives came alongside. Each one was made a present of tobacco and pipes at which they showed great pleasure. Samuel White in his notes writes:

"Soon after coming to anchor a canoe full of natives came off, and after making the people some presents I ordered out a boat, and one of the crew pulled me ashore. Leaving the boat I entered a thick scrub; the ground was in a very swampy condition. I secured seven birds, four of which were new to me. Saw and heard a good many birds, but the place was so wet and swampy that it was only with great difficulty one could get about. I think rails were numerous for I heard many, and the call is like the Cape York bird." All the natives seen, were most quiet and orderly. The canoe that brought them off (there were about a dozen natives) flew the Dutch flag. They were of a light-brown colour, wearing a piece of cloth round their waist, with the exception of the Chief, who had a dirty piece of plaid about his shoulders. They were extremely quiet, and made no attempt to come on board until they were invited, when the chief stepped over the side the rest followed. Unfortunately they knew not a word of English, nor did they understand Malay, at least they showed no sign of doing so when addressed in that language. In the evening the Chief and several others paddled out to the yacht, when they saw the owner go on board. It was amusing to watch the chief and his son, who were invited to partake of tea, they sat up to the table with knife and fork imitating all the white man's movements, and behaving in a most discreet and temperate manner. At dusk the natives were all sent on shore. They would not give or sell cocoanuts. The Chief had three half bottles of cocoanut oil, and refused three new coloured handkerchiefs for them. Samuel White again writes under January 25th: "I did not get far from the coast to-day, but the country I saw was very low and wet; there was a bank of sand along the beach covered with a dense mass of bushes, vines, and long grass, and directly beyond this a low, swampy scrub begins, and the water lay everywhere, from just below the surface, to knee deep. The scrub was dense, and I observed growing amongst it, the cane vine, cycus, casuarina, the latter grew to an enormous height and size, some of them 200 feet tall, with spurred butts that would measure more than 20 feet round. These are the largest swamp oaks I ever saw. Good numbers of cocoanut palms grew all along the coast, we observed them all day when sailing along the coast of Tragan, as well as Mycore. This must be a comparitively new feature in the Aru Islands, for when Wallace visited these Islands in 1857 there was not a single tree. the nature of the country prevented me from feeling that amount of satisfaction that I should

have, upon being on a new field where every sound was new, but I distinguished many old and well known voices, among them Ralina tricolour, White Cockatoo, Blue Mountain Parrot, Oriole, Leather-head, and I shot a specimen of Glariola grallarea. The wind has been light all day, and it is quite calm this evening." Next day, Saturday 26th, there was not a breath of air, and very soon a light drizzly rain set in, the specimens taken on the previous day were preserved. At 10 a.m. a light wind sprang up, so all sail was made, but very soon the boat was becalmed, and a light rain set in and continued for some time. Late in the afternoon a light breeze blew from the S.E., and the yacht crept along the coast as far as the Maykor Channel. Samuel White writes: "The names and positions of these islands seem to be in much confusion, and the charts are quite useless."

After rounding the point of the supposed Maykor (according to the chart), but which was in reality Tragan, a number of canoes of various sizes were seen upon the shore. One was a prau of considerable size (about 20 tons). Near this craft, and close in shore, the anchor was let go in three fathoms of water. It was not long before a canoe put off from the shore, and came alongside the yacht. The crew, consisting of six men, propelled the canoe by means of short spoon-like paddles, chanting a song and beating a tom-tom. Besides the crew, the canoe or prau contained a native teacher in a complete suit of clothing excepting boots—he even wore white cuffs, two others accompanied him, who seemed subordinates. They could not speak a word of English, but could converse fairly well in Malay with the owner of the yacht. Referring again to my father's notes he says. "These men (the teacher and his assistants) confirm the statements of the last natives in calling the small nameless Islands on the chart Maykor. I asked them into the saloon, and gave them some tea and bread, and the three sat at the table and behaved in a most modest and becoming manner, but they are all great beggars. They wanted tobacco, then grog, and to test the various reports I have read upon this subject, I brought out a bottle of Rum 20, O.P., and poured out about a third of a tumbler for the principal man, who tossed it off without a grimace. I assisted the others to a good nip, which they seemed to relish, the head man then motioned to be permitted to give some of the crew a drop. I began to assist them, but he was desirous to help them himself, and took the bottle out of my hand, gave some of the crew a very tiny drop, passed the bottle over the side into the prau,

then after shaking hands all round, left with the bottle. Having given orders to have a boat lowered, Samuel White went over the large prau to see if he could get any information in reference to the islands, and in his notes he says: "The Captain and owner of the prau and several of his crew came back with me on board and stayed an hour or more while I showed him the charts. He seemed quite familiar with all the Islands and places between Sumatra and the New Guinea Coast. He was a very intelligent man, and I was much taken with his open countenance and manly bearing, as well as with his quiet and unobtrusive demeanour. Owing to this man's superior intelligence I was able to gain much information about many things. The prau in which this man has to make a voyage of twelve or fourteen week's duration, was a strange looking craft forward, for one fourth of her length she was low—not two feet from the water, she then rose abruptly to more than three times that height, which was carried on to her stern, on each quarter about eighteen inches from the water, was a square hole, through which rudders projected into the water, which were worked from inside.

The next day being Sunday, the yacht remained at anchor, and all hands remained on board. There was plenty of amusement all day, for the craft was full of natives of all kinds from daylight till dark. Several of the native teachers came off dressed in their best, and one, a tall and rather intelligent man, could speak a little Dutch, and he told my father that there were four islands in a line from South to North.—Tragan, Watali, Maykor, and another small island round the North end of Maykor. There was plenty of trade offered. One man bartered four pearls for 280 rupees. Other items for sale were tortoise shell, birds nests, cocoanuts, eggs, fowls, parrots, pigeons, paradise plumes, etc., etc., very long prices were asked for everything, and money was the trading article. Ten plumes were purchased for 20 shillings each. Several more were offered, but the natives refused 16/ and 18/ each for them. The saloon was crowded with natives for hours, but no attempt was made to thieve, nor was anything lost, they were remarkably well behaved, but as previously mentioned, great beggars. Some wanted salt, some tobacco, some soap, whilst others wanted a little of everything, and all clamoured for grog. Amongst the visitors was a merchant, connected with the trading prau, a slight and sickly yellow man, with a few light clothes around him. He was accompanied by his wife and two children. The lady had a piece of coloured calico thrown loosely round her, the children were better dressed, a

little girl of eight or nine years, having a clean loose frock of coloured calico drawn around the neck, and the other, a chubby-faced boy of ten or eleven years, wore a white calico shirt and pyjamas, with a blue calico head dress. The wife and children were a warm dark brown, the wife being most likely an Aru woman. It seemed the universal custom to shake hands. The little girl appeared first, and after shaking hands with my father, presented him with a little papier-mache box, containing twelve bright-looking pearls, and he says in his notes: "I ascertained that this was a present, I took them all three below to the saloon, and made them presents of coloured calico, handkerchiefs, beads, jam, knives, etc., at which they appeared very pleased. The merchant had a few large but dull pearls for me, for which I gave him rice and jam, whereupon he showed much pleasure, and hugged me round the neck repeating the word "Rajah" many times, a name by which I am addressed by all here.

They were all remarkably quiet and well-behaved. I was called on deck to see a man who could speak English, but I soon found that his English was confined to five words, three of which were blasphemous ones. The number of plumes of *P. apoda* offered to-day, go to show that this beautiful bird is not yet extinct, and I hope before long to meet with them in their native forests. No King birds of Paradise had yet been offered, although Wallace said they were plentiful when he visited these Islands." The weather was calm with light rain. The next morning, the 28th, light rain was falling, but in spite of this Samuel White ordered out a boat, and was landed upon a jutting piece of the coastline, covered in thick scrub. The land was very low and wet, which made collecting very difficult, for all this part of the island was densely wooded.

13.—ANDREWS IS LOST.

Under the date of Monday, 28th of June, Samuel White wrote:—"I did not get as many birds as I expected, returned at noon to the yacht, and went out again this afternoon and procured a few more. Andrews went out with the gun, and after a short time in the scrub became quite exhausted. Among the birds taken to-day were some beautiful parrots. No Birds-of-Paradise yet, but a lot of plumes were offered to me to-day, and fifteen shillings a piece was refused. Notwithstanding I have been trying to persuade myself to the contrary I begin to be convinced that I have made a great mistake by not getting native gunners from Sydney or Thursday Island. My white men are too soft and unaccustomed to the climate to be of much use, and labour is not to be got here. The crew have been cutting wood and bringing it off all day to the vessel. The weather has been squally, and travelling through the scrub very uncomfortable, as we were wet to the skin all day; shall only stay here to-morrow, the country is too low."

Next morning at sunrise Samuel White and his taxidermist (Andrews) landed with guns, and returned at noon, Andrews only having four birds, while my father brought off ten specimens. Andrews was too distressed to land in the afternoon, but the owner of the vessel went off and brought back several more birds. His other taxidermist (J. Cockerell) remained on board owing to a bad foot, but he put the time in curing specimens. Some traders visited the ship during the day offering live parrots, also paradise plumes. In the evening the native teacher, who was a man from Amboina, came on board. My father writes:—"This native teacher is a very quiet and well-behaved man. He, unfortunately, cannot speak a word of English, but I am able to make myself understood with a few words in Dutch. I made him a few presents of coffee, tobacco, and a knife. I wished him to procure for me a man to show me the nearest village, where the natives captured the great birds of paradise; but after making enquiries, he said they would not come with me because they were afraid. I believe they were afraid we were going to interfere with their trade, as they do a good business in plumes. Soon after this some natives brought off plumes for sale, and through the teacher I was able to purchase fifteen plumes at a slight reduction on twenty shillings, but they would

not deal for anything but money." Heavy showers passed over during the day, and those who went into the scrub were sopping wet, for all the trees and shrubs showered down water long after the rain ceased. On the morning of the 30th the yacht left the anchorage off the village of Maykor. Just as the vessel was getting under weigh a canoe came off with some cocoanuts and a *megapode* egg, the latter had a fledged young one in it The natives were made a present of coffee and sugar. The wind died away, and very little headway was made; a current setting in, the anchor was dropped in six fathoms between Maykor and the small island off the North end. On July 1st the anchor was lifted, but the wind was very light, and at ten o'clock the yacht was about four miles off shore. Samuel White gave orders for a boat to be lowered, and he, with his two taxidermists were pulled on shore by two of the crew. They remained here until 3 p.m., while the vessel worked up. They then went on board, having obtained six birds, but this was not a good collecting ground. When the boat left the island, Andrews could not be found, so one of the crew with the dinghy was sent off to look for him. At ten o'clock, nothing having been heard of Andrews or the man with the boat, an officer with a boat's crew was sent to search for the two men. The schooner continued on her way southwards, about five miles along the coast of Wokan, when a deep inlet or mouth of a creek was sighted, and here the vessel was brought up in nine fathoms. In the middle of the channel it was found there was fifteen fathoms of water, and a very strong tide running out. Samuel White in his notes says:—"This channel we have anchored in is, I believe, the Watelai Channel, and looks like the one in Wallace's chart, and not like that marked on either of the admiralty charts I have before me. Here I have dropped (by accident, whilst trying to make a village that was seen from the ship's decks), on the very place I wanted to reach. Up this channel is the village of Wanumbai—Wallace's old collecting ground. At dark a prau came alongside, and the crew pointed up stream and said Wanumbai, so I believe this is correct, although at Maykor I was directed round Dobbo to reach Wanumbai. Great numbers of fish were jumping out of the water all around the vessel, but would not take a bait. A small whale was also playing around all the evening. The weather all the morning was hot and sultry; in the afternoon heavy clouds came up, and a steady rain set in all the evening." At seven o'clock next morning the man with the dinghy turned up without having

Black Cockatoo

(*Calyptorhynchus funereus*).

Drawn by Samuel White in Water Colours at the age of eighteen years.

seen anything of Andrews, and several hours later the second boat's crew made their appearance with the report that they had not seen any trace of the missing man. At noon Samuel White left with a fresh crew in one of the ship's boats, and made along the coast to the north, and after a few hours' search, found Andrews in a hollow tree, where he had spent the night. He was taken on board, seemingly little the worse for his adventure. All Andrews could find to eat were some large green frogs, which he described as being of excellent flavour. During the afternoon Samuel White, with Cockerell, landed on the island of Maykor, but they had barely set foot on land when heavy rain fell, and continued till sunset, and they had to return to the craft without procuring anything. Under this date my father writes:—"Just before sunset, when the weather showed signs of clearing, I ordered a boat out and landed on the reef close by at low water, to look for shells, but there was nothing worth gathering. A canoe full of natives came off this evening with shells and a few birds, all of which I purchased to encourage them to collect. There are *Paradisea apoda* near here I know, for I heard them this morning. I rose before it was light, to sit on the deck and listen to the sounds and calls of birds, and among numerous voices I heard that of the great bird of paradise. Being otherwise occupied to-day, I shall endeavour to make their acquaintance to-morrow." The weather all the morning was fine and hot, but the afternoon was wet. Samuel White in his notes under July 3rd, says:—"This morning I took Cockerell and landed on the left bank of the Watelai Channel, or what is according to Wallace's chart, Wokan. We pushed our way several miles back, but the country was exceedingly rough and unproductive. The moment I landed I heard and saw several of the great birds of paradise, and in a few minutes shot one, but found it was a female, and of a chocolate brown colour all over, much darker on the head and chest. During the day I procured four, and saw several more, but they were all of the same colour. They are as large as a small crow. The old birds being like the rifle birds of Australia, very shy, and surrounded by perhaps fifty females and immature birds. We returned to the craft in the afternoon wet to the skin as usual." Before dark that evening, Cockerell landed again, this time on the other side of the channel, but returned after dark without collecting anything, and reported that scrub was almost impenetrable.

As soon as the natives sighted the "Rajah" (meaning my father) going on board, they would swarm off to the ship, and

the decks of the latter would be soon covered with their dark forms, each one having some article to barter in the shape of living birds, reptiles, shells, insects, arrows, plumes, etc. They drive hard bargains, but nearly always want rupees. They are very persevering and patient, behaving in a most quiet and becoming manner. Always asking more than they take; time appears to be of little object to them, for if they cannot make a bargain to-day, they come again to-morrow and the next day. The traders in plumes were all Malays or Macassar men, and seemed to set a standard commercial value on them to which they descend, but no lower. If trade such as calico, tobacco, cutlery, be offered in barter, they will take it up quietly, turn it over twenty times, count it over and over, calculate the quality and commercial value to them, and if they can get no more and can see a profit, they take it up and walk away. Again turning to my father's notes about this time I find:—"Every day I have been here I have been trying to trade for fresh birds of paradise, but I now believe that none of the dealers catch the birds themselves, but barter for them with the Aru natives or 'Blackangtanna men' as they are called, which really means 'back country men.' They are therefore not able to get fresh birds. I have been offering a gun a piece for them, which is equal to £2 15/ a piece, but have not succeeded yet. I will go to Mr. Wallace's old collecting ground 'Wanumbai,' and try the natives there. Plumes are to be had in plenty indeed. I have been so pestered with traders to-day that I have had to put off much of my work till the evening, and then they will come off up to eleven p.m. offering plumes for sale as well as live parrots of various species, some of them most gorgeous in colour. To-day, for the first time, natives brought off *Cuscus*. One was a light straw coloured animal, the body beautifully spotted with black, and of a salmon pink about the face; the other was pale sandy brown, with a dark stripe down the back. These animals differ from the southern opossum, no less in the texture of the skin than in their colour, indeed, the skin seems to have no texture in it, for it is more like wet tissue paper than skin, which will not bear its own weight. If torn it is too thin to allow of sewing. The natives seem to be fond of the flesh, and I always return the carcass to them, although purchased to encourage them to bring more." Although these natives wear ornaments they will not take beads unless they are red or white, these seemingly are the favourite colours. The weather was very unsettled at this time, rain fell every day in long and drenching showers, and the scrub showered

down water on the party at every step, all day long keeping them in a constant bath. Fresh water was running everywhere and tumbling into the Watelai Channel on both sides. In some places at low tide, fresh and good water was running into the channel several feet deep, and 150 yards below where the salt water had been in the morning. On the 4th some large parties of natives were off to the ship before sunrise, for they found that the "Rajah" was off collecting early in the day. Many things were traded for, and amongst others a large iguana, a rat, arrows, shells. Some praus came down the channel later on, on their way to Dobbo, and of course the crews might satisfy their curiosity by boarding the yacht. Writing upon this incident my father says:—"Some of these men who visited us to-day in their large praus had pearls for sale; some had plumes. I could not see anything in their boats they were taking to Dobbo for sale, and they did not appear to be traders as they could not speak a word of Malay, and had a good deal of the Papuan appearance about them. Several wanted to purchase tobacco with silver coins, and all appeared much surprised when I refused money. Some of my crew were on shore this afternoon, and when they returned they said they had seen a full plumaged bird of paradise not far from us. I can scarcely credit it. The weather was gloomy all day, and little rain fell."

14.—THE GREAT BIRD OF PARADISE.

Samuel White, writing under Monday, July 5th, states:—"This morning I started early to try and find the *Paradisea* that was seen yesterday, but did not see a trace of it. Returned in the afternoon wet to the skin as usual, and with four birds only. Andrews as usual secured nothing. Cockerell went back some distance in the island and struck a piece of good country, where he procured three lovely little kingfishers and two *Paradisea apoda* in full plumage with the exception of the side plumes. The country is so dense in most places that it is impossible to travel through it, and just now water is oozing out everywhere; and although the islands have the appearance of being low throughout, they are really quite hilly in some places, having rather deep ravines in many instances, and so thickly entangled with fallen trees, vines, and other undergrowth, that it is impossible to penetrate this thick mass without cutting a way in. The weather to-day has been wet, rain began to fall about 10 a.m., and heavy showers fell all the afternoon. The natives came off in numbers again when they saw me come off to the craft, bringing all sorts of things. I purchased birds, rats, seeds, shields, bows and arrows, reptiles, and many other things. Some natives coming down the Wateilai Channel would not part with two plumes for less than 20/ a piece."

The 6th was spent on board the yacht owing to the continuous and heavy rain, all day. Samuel White and his taxidermists occupied their time skinning and curing birds, reptiles, etc., my father doing the bulk of the work as usual. The officers and members of the crew amused themselves- mending their clothing and reading. A number of natives came off to the boat, bringing five birds, three plumes, besides numbers of shells and some bananas, all of which were purchased with calico, tobacco, and beads. During the day a large canoe came down from Batuli at the east end of the Watalli Channel. These men wore calico round them, were very clean, but could speak neither Malay nor English. Next morning Samuel White landed with his two collectors. The weather was threatening, but the rain kept off. My father and Cockerell followed a creek which led into the interior of the island of Wokan. There was water in the creek which ran over a bot-

tom of coral and petrified shells, being clear of scrub, formed a rough road. The stream was followed for about four miles, and was found in places to be ankle deep, and in others up to the traveller's waists. At four miles the creek branched off into many small streams, the largest of which was followed for another three miles, when it became so overgrown and choked up with vines and thick scrub, that it had to be left. My father says in his notes:—"Proceeded to a little rising ground, and after a short search we heard *Paradisea apoda*. We went under a large tree and imitated the bird's call, which sounds like the words 'wark,' 'wark' repeated five or six times in succession. We had not long to wait when a bird in full plume came into the tree and perched on a bough directly over my man's head and commenced dancing in their peculiar fashion, with its golden plumes spread out and waving in the wind, it seemed but an instant and the report of my companion's gun rang out, and the bird was writhing amongst the wet leaves, for it was raining fast. It was a lovely bird with full length of plumes, which were of a deep rich golden orange, tipped with light brown; the bill was blue, and its bright eyes saffron yellow. A broad ring round the base of the bill as far back as the eye was of a deep rich green, and the hair-like feathers stood on end like plush. On the throat and under part of the neck the feathers are short and stiff, and of a rich shining emerald green; the chest is of a deep purplish brown; the under part deep chocolate brown; the top of the head and back of neck, rich straw yellow; the feathers of the head are short and stiff, and stand on end; but lengthen as they proceed down the back of the neck; the back wings and tail are a deep rich chocolate brown; the shafts of the two centre tail feathers are lengthened out beyond the tail to a length of 20 or 30 inches, and are of a wiry nature. This is a glorious bird seen in its native wilds, and this is the first adult *P. apoda* I have seen in the flesh. The chief object of my calling at the Aru's is accomplished, for I have the first great bird of paradise. It is the largest of the genus, and is the size of a crow, measuring 27½ inches from tip to tip of wings, and from tip of bill to the end of short tail feathers, 18½ inches. We secured two other specimens, one a female, which was all chocolate brown, deeper on the head and chest, and is a smaller bird; the other a male, wanting but the side plumes to make it perfect. The birds require to be 8 or 10 years old before they are quite perfect, then they become exceedingly shy. The tree under which we stood happened to be one which the birds select to "dance in." He

was attracted by the noise we made, and came to his accustomed place to display his beautiful plumes, and was unconscious of our presence. Several more were heard and looked for, but the rain fell in torrents without ceasing, the sun had been obscured all day, and every rivulet was now swollen to a foaming torrent. The large creek by which we came up was full of muddy water, so we had to take to the scrub, and not being able to see the sun, mistook the bearings and came out on the west side of the island beyond where Andrews was lost. The beach along the coast is rocky and impassable, and as darkness was coming on we could not think of going through the scrub again, so made up our minds to wait till morning on the shore, but just as light was going a native prau came past on its way to the mouth of the Watalli Channel. We waded out and boarded the native craft. After a long time poling along the coast, on and off reefs, we got near enough to make our people hear us, as the yacht had that day dragged her anchor about two miles down stream. A boat came off and took us on board at midnight. The weather had been excessively wet, the rain poured down continually all day till dark, when it eased up for a short time."

It is only a keen field ornithologist who can enter into the deep feelings which impelled my father to write these notes. Can the reader follow this wonderful field worker wading up a stream past his waist treading over the cruel coral, forcing his way through prickly jungle, rain falling incessantly, soaked to the skin. Then all is forgotten, and he is kneeling amidst the wet fallen leaves of a tropical jungle with a great bird of paradise in his hands; there on the spot he is noting up the colour of the soft parts before they fade in death, not only that, but taking notes of the wonderful lustre of the great bird, and he says in his notes he has accomplished that which brought him to the Aru Islands, and had seen *Paradisea apoda* in all its glory in its native habitat, Taking his precious prize he has to plunge into the jungle, gets off his bearings, and comes out many miles along the coast from the yacht, rain falling all the time; at midnight he is able to change and get food. Not a word of complaint or comment upon the great privation is found in his notes, for he had succeeded in his quest. His must have been indeed a constitution of iron, but he overdid it as the sequel of this short sketch will show. The next day, the 8th, was again wet, so my father and his two collectors remained on board and cured specimens, the owner of the yacht trading with the natives, who thronged the vessel all day. It required

no end of time and patience to trade with these men. "No" would be said to one man twenty times or more, yet still he would persist in offering his stuff. My father gave orders to shift the yacht about two miles up stream, and the anchor was dropped just off the end of the island in ten fathoms of water over a rocky bottom. In between the showers during the afternoon Cockerell took the dinghey and pulled on shore and secured a few parrots. The natives brought off some birds as well as a fine wallaby, which were all traded for. In my father's notes dated the 9th he writes:—"I did not go on shore to-day, but stayed on board to skin some birds and do some writing, but the natives pestered me so much that I could not get on with my work. Anything the natives have to barter the Malays or Macassar men seem to take in hand for them, and prove far more troublesome than the Aru men. I was hours to-day bartering for two birds. Some wanted rice, tobacco, calico, rope, and one man wanted the ship's anchors. Cockerell came on board in the afternoon with some birds, so I went on skinning again. Andrews came off in the evening with nothing as usual. I bartered and traded with the natives to-day for a few insects, besides seeds, shells, animals, etc. Rain fell off and on all day, but the evening is clear." The night was clear and fine, but at daylight rain began to fall. My father ordered a boat out, and landed with Cockerell. They came off to the yacht in the afternoon drenched to the skin, with a few birds. The latter were almost spoilt owing to being unable to dry them during such damp weather, the atmosphere being so charged with moisture. Andrews went on shore during the afternoon, but came off without a single specimen. The natives crowded on board all day. Birds, insects, shells, etc., besides a plume were traded for. It was laughable to see them come on board with all manner of things. One man would have a joint of bamboo filled with worms, centipedes, and such creatures; another a basket full of dead shells picked up from the beach; a boy would have a small basket filled with pieces of banana leaves, each piece folded and tied up with a piece of split rattan, in each parcel there was a bug, a small beetle, or a spider, a grasshopper, or a cockroach. They brought small birds shot with blunt arrows, strung through the nose with split cane, live birds tied by the legs to a piece of stick by rattan, birds eggs, bows, arrows, spears, and numerous other things. As each man presented his article for trade he would cry "Tombacco" (tobacco) "Mama mama" (beads), or

whatever he wished for, but when a plume was offered rupees were asked for, and if by chance they took trade for it, they would take care to receive or demand twenty shillings worth. They seemed to have a set commercial price, and it is like personal estate to them. It still continued raining day and night. On the 11th some notes show that Samuel White served out the week's stores to the cook as usual, then set to work at his writing. The weather was very wet up to noon, when Cockerell and one of the crew took a boat and pulled over to the other side of the channel, where there was a creek. He brought back a few birds, amongst them a half-plumed "*apoda*". The natives were on board all the afternoon with all kinds of rubbish in leaves. Two birds were bartered for, but several others were so knocked about that they were of no use. The weather in the evening gave indications of clearing up.

In some notes dated the 12th my father writes:—"This morning I had a boat swung out and landed a little way up the channel. I made my way to a large fig tree which was in fruit, where a variety of birds assembled. I stayed till about 2 p.m. and secured 12 birds. Cockerell went over on to Kobror and took two half-plumed *apodas* and two king bird of paradise (*Paradisea regia*). I bartered for a few small birds, besides other things, from the natives, when I returned to the yacht. The weather has been splendid to-day, the sun shone out warmly, and we were enabled to dry sails, clothing, etc. The wind blew fresh from the S.E."

On the 13th all hands remained on board. My father and his two collectors skinning birds and animals all day, the former dealing with the natives as they came on board with specimens. The natives soon found that the "Rajah" had a set price (i.e., a stick of tobacco), for small birds which were shot with blunt arrows, and this gave less trouble. Birds, lizards, shells, seeds, eggs, rats, etc., were secured during the day. The crew listed the yacht and painted her at the water line. The weather was very fine, rather warm in the middle of the day.

On Wednesday, 14th, Samuel White writes:—"This morning I made my way to the fig tree again, and secured several beautiful pigeons. Returned to the yacht, and made preparations for a boat expedition up the Wanumbi Channel taking stores for a fortnight."

15.—A TRIP TO WANUMBI.

In some brief notes made by my father, and dated from the 14th to 21st of July, he says: "About 1 p.m. on the 14th, I made a start in the largest boat, taking a crew of three men to pull, and one taxidermist. I gave instructions to make along the South side of the channel in which the yacht is lying. In a very short distance we saw a wide opening stretching away to the South with the tide running up strongly. I determined to try it, and steered the boat for the entrance. Later in the day I ascertained from the natives, that it was the Wanumbi River. As we pulled up easily with the tide I could see that it was a river or channel, and not a blind inlet. At the entrance this river was about 200 yards wide, with dense mangrove scrub on either side. After this it gradually narrowed for about four miles, when it struck off into several branches, and I determined to follow the largest, but after following it for another three or four miles it rapidly decreased in width and depth, and in a short time ceased to be navigable at low water; in fact the river ends in a mass of bare rocks of a kind of limestone like hardened white clay, and appears to be coraline limestone, such as we found all through the islands. Fresh water was running into the river here at several places, and what appeared curious, there is scarcely any soil anywhere near the place; yet there is a dense growth of scrub growing as well as mangrove trees. At the top, or where the rock dries at low water, is situated the village of Wanumbi, consisting of two houses raised on piles in the usual way, placed on a piece of rock about 300 yards from the creek, and surrounded with dense scrub, with the exception of a small piece of partly cleared ground, where there is shallow covering of black rich soil, and which the natives cultivate. When we arrived the rocks were bare and dry near the creek, and it being a neap tide the water did not rise much that night, so we made our camp on the bare rocks, as all the scrub was wet and dirty after the continued heavy rains we have had lately, indeed the day we started was the first fine day we have had for a fortnight. Next morning we awoke with the water under us and all round us, the fire put out, and everything afloat, the water having covered every particle of the rock, so we had to

take refuge in the boat. Seeing several old praus lying up, I determined to take possession and live in one if permission of the owner could be obtained; this was soon arranged, and after the old craft had the boat's sails thrown over, it made a very respectable dwelling, particularly so, as it rained all day, and night, then the weather cleared up, and the sun came out hotly. I took my gun and went into the scrub. Found numerous tracks or paths, but after the heavy rains they were half way up to the knees in sticky mud, and the roots of trees and stems lying about made walking very trying and troublesome. I saw villages of one or more houses and plantations everywhere during my rambles, frequently met men on their way from one home to another, always with a bow and a handful of arrows, these men were always civil in showing the way, and invariably begged for a little tobacco; the women were rarely seen, and if met suddenly, they ran into the scrub till I passed, or if natives were with me they would stand on one side while we passed. Birds were not numerous, the call of the great bird of paradise was heard several times, but they were found to be young males or females. The news of my doings had reached Wanumbi before me, and all the boys and young men were off hunting with their bows and arrows, and brought in hundreds of different things daily. All sorts of rubbish, from a piece of fungus to a bird of paradise, each trifle wrapped and tied up in a separate leaf. The dealing and bargaining for these things or such as I wanted was at times laughable, while at other times very aggravating. They are most persistent and haggling kind of dealers, especially the Macassar men, who have no conscience, frequently asking a hundred times more than they take, and they never seem satisfied. These men will present a thing twenty times after being refused, always with the same cry, Tombocoo (Tobacco) or Mania Mania (beads), or pise (knife), or whatever he may have asked for first. They will try many little schemes in dealing, such as presenting the worst article first. A man will tie up single beetles in separate leaves and offer one, and when that is purchased, he will present another, and so on for a dozen times he will present a small bird, while the rest are hidden in the cloth around his waist. I think these people have but little food to spare as the insignificant quantities that were offered me were not worth speaking of. Two small sweet potatoes have been offered for fifty times their value, one hen's egg, half a bunch of bananas, one cocoanut, and so on, and, if what they ask be paid, they frequently say "tauba" (more). They swarm

around the camp all day long, filling the place we live in, and will not move to allow us to move about to get our food, making a perfect babel of voices, they talk loudly and incessantly, and are the noisiest people I ever came across. Nevertheless they have many redeeming qualities, being civil and obliging, if it costs them nothing to be so highly good tempered and moral and above all they are strictly honest, that is they do not steal, and although they pried into anything we had, they did not take anything without asking, and I had many things laying about which were very tempting, especially red beads—a great temptation among the young people. A theft could be easily committed, and I could never have found the thief. There were very many fine young men amongst the crowd, and I felt grieved to see the beastly habit of chewing "Betel Nut" carried to excess, some of the older men having their features positively distorted through that habit. This habit if long continued gives the mouth a most ghastly appearance. There are not so many big bushy heads of hair amongst these men. Most of them have their hair cut short, some had their heads shaved. Most of the boys about ten or twelve years of age were seen chewing the horrid compound of nut, leaves and lime. Men and boys were out every day with their bows and arrows and shot me lots of small birds, great lizards and frogs, besides cuscus, rats, and bandicoots, it was holiday and feast time at Wanumbi while I was there. The country all around our camp is low, and was covered with a dense virgin scrub, and the soil does not seem to be deep anywhere. The birds were not numerous, and strange to say, I did not see a single adult great bird of paradise. Rats were numerous and very troublesome about our camp. Insects were not abundant. I secured a few good beetles, and one day secured about twenty-five butterflies, and many of the species were those found over the North of Australia. One must bear in mind that the month of July is not the best by any means for insects. Several times during my stay here I have taken two men and the boat at night and pulled down to the yacht and back with the tide. I always choose the night, because the air is cool and pleasant, and it surprised me much not to find more sand flies and mosquitos; they were not very troublesome, although we were surrounded by mangrove swamps. The banks of the river as we went to and fro presented a very beautiful sight, the banks themselves were low and muddy, covered at high water, but the river was hidden by the rich green foliage of the mangroves, which reached from the water's edge to

60 or 70 feet above it, to outward appearance as dense as a wall with breaks here and there on either side when small creeks and inlets join the main stream. Along the river the birds were not so plentiful as would be expected. We saw scarcely anything with the exception of a few small kingfishers perched on bare twigs near the water or on a mangrove root. To-day, the 20th, I shifted camp and came back to the yacht for there is only Cockerell available to skin, and he is over-worked with material coming in. The same day we arrived at the yacht canoes came down from Wanumbi with specimens.

With the exception of two wet days the weather has been fine; the sky is always more or less overcast, and the sun comes out at times very warm."

The day following my father's return to the yacht was a very hard one, for there were many specimens to skin, and he and Cockerell were going day and night to catch up with the material as it came in.

Under date of the 21st my father writes:—"Late last night and all day to-day Cockerell and I have been skinning, and have not yet cleared up. I have now obtained several "great birds" from the natives, but I am paying dearly for them, for I have to give a gun for each one—guns which cost me £3 15′ each; but I came here expressly for the great bird of paradise, and I am determined to have them at all cost. They are only found on two islands in the Arus, and are most glorious birds, as big as a crow, with most beautiful floating golden plumes more than two feet long. The bird is excessively shy, and lives in the densest part of the scrubs; the natives alone know their haunts. A number of birds and other things came in to-day brought by the natives." Next morning early my father and Cockerell were at it again, and it was not till nearly dark when all the material was finished up. Cockerell cleaned up the skinning room while my father packed away specimens to make room. A few small birds came in that day, and they were cured before turning in that night. The next morning, the 23rd of July, some natives came off to the yacht very early, and brought three full plumed *Paradisea apoda*, and one half-plumed bird. These were purchased with guns, powder, and axes. After breakfast Cockerell went up the creek on the Wokan side of the Wateilai Channel and returned in the evening with one King Bird of Paradise (*Paradisea regia*), and several other species. Under the above date Samuel White writes:—"I remained on board to-day to skin two or three "great birds", for I want to make sure of

good skins. I have paid away a great deal in trade for these birds now, but I find the only way to get the rare and shy bird is to offer an exhorbitant price for it. There are natives hunting for the plumes of these birds in every part of Mykor and Wokan, and I feel sure these fine birds will be wiped out in the very near future. This evening a few small birds came in. The weather has been showery all day." My father writing again on the 24th says:—"I kept my two taxidermists in with me to-day, for there were many animals and birds to skin. I have given orders to Cockerell to keep to the birds, and have put Andrews on to the mammals and reptiles. The latter does not make as good a skin of the birds as I would like. The natives were off in several lots to-day, and brought aboard ten small birds and two "Burong Matti" (great birds of Paradise). The guns are all gone now, and it is difficult to deal with some of these natives; they know not what they want. We have cleared up this evening, and have no specimens left to skin. The weather has been showery; the first strong wind for several days blew for a few hours to-day." The next day Samuel White intended putting things straight on board the yacht, washing up, etc. He often said his cabin (where he kept his trade ammunition and a thousand and one things) "was like a pawn shop" upside down after haggling and bartering with twenty or thirty natives. From a rough note it appears that thirty to forty birds came in during the day besides mammals, shells, reptile, insects, crustacea, etc., etc., so it can be easily seen that my father or any of his staff had little time to clean up. My father says:— "Amongst the birds brought in to-day were two fully-plumed "great birds", and one king bird. I have to pay very heavily for everything, as I can see it is the only way to ensure a supply being brought in. Most of the men and the boys about the island prefer tobacco, but the Wonambi people want "mama mama" (beads) for everything. The people who visit us now up here are mostly Aru men, the Malays, and Macassar men generally live near the coast. The weather is still showery although we have a little sunshine between, the wind blew strongly and cool most of the day.

On Monday, 26th, my father and Cockerell stayed on board skinning all day. Andrews did some work amongst the mammals and reptiles, but seems to have been given up for odd jobs. He was not suited for hard work in the tropics. It can be easily seen that the work of trading with the natives was quite enough for my father without doing the bulk of the skinning, and he over-taxed himself far too much. The

natives took so long in deciding what they would take for the stuff they brought in, haggled over it for hours, and the great naturalist could not lose his temper, for it might offend them, and they would not come again. When a man brought anything for sale he would sit or stand about for an hour at least before he could make up his mind what price to ask. When he did make an offer to deal he would ask ten times as much as he would take. They did not mind standing about between decks filling up all the space on the yacht so that it was with great difficulty the crew could move about. In some notes upon this subject my father says:—"I have made it a practice now to offer a fair price for what is offered, and if refused, not to deal for that article again at any price, so that some who know me will not refuse the price I offer. Their greed at times knows no bounds. A man came the other day with three cassowaries' eggs, and wanted a double barrelled gun for them, and when he could not get what he wanted he took the eggs away."

16.—TRADING WITH THE NATIVES.

No great Birds of Paradise came in on Monday, July 26th, but the natives brought along about twenty other birds of several species, a cuscus and several rats. My father and both his taxidermists were now suffering very much from the effects of arsenic and arsenate of potash in the skin curative, "Arsenical soap." My father always prepared his own soap for this purpose, and made it doubly strong. When this preparation works down under the finger nails and especially the thumb nails, it separates the flesh from the nail, and keeps it in a constant state of festering. Often the irritation reaches three fourths of the distance down the nail, and if the ends of the fingers come in contact with anything hard, it makes one cry out with pain. I have experienced this myself, so it can be understood how the great Naturalist and his assistants suffered when they had to skin and cure hundreds of specimens in a week. The weather was showery during the 26th, little if any wind was perceptible. The next morning Cockerell was sent out with the gun to see what he could get. One of the crew landed him and came back with the boat. My father and Andrews remained on board to barter with the natives, and cure the specimens, but they had far too much to do for the natives came in with a good number of birds, amongst these some great birds of Paradise, and two "Goby, Goby's" (*Paradisea regia*). The great birds were not all fully plumed, some were young males and others females. Cockerell returned with several birds, one a large Manucode or fruit crow. In some brief notes my father wrote on that day. "The natives have been coming and going all day, and my patience has been put to a severe trial, these fellows are so persistent, and so troublesome, and it will not do to fall out with them, as they may then not come at all, it is amusing to see some of them when they bring a "Buring Matti" (Great Bird of Paradise) for sale.

They know not what to ask, but will sit or stand for the first hour and refuse all offers, then perhaps they will name over a long list of things required, then alter their minds and name over another list, "Sopie," (spirits) often included, thus they remain to my great annoyance blocking up every inch of space to such an extent that we cannot move. I have had too much of them to-day, the skinning room has been full

all day, and my dusky visitors have been talking incessantly, and at the top of their voices, making so much noise that we cannot hear ourselves speak. This afternoon a good number of beetles came in, bugs tied up in leaves, caterpillars and beetles tied in green leaves, large longicorns with their legs tied up to keep them from running away, or tied in bunches by the antennae.

This evening for the first time a quantity of sweet potatoes was brought on board (about half a bushel), and I purchased them for ten times their value. A man came off this afternoon with two Great Birds of Paradise in such a state of putrification that their feathers were falling off them, and these birds are very far gone when the feathers come off, for I have frequently skinned them when they were quite green, and full of maggots, and the skin is exceedingly tough, and the feathers well set. These two birds had been rolled in ashes to absorb the moisture which was coming out through the feathers, and their beautiful plumes were soiled from end to end. The fellow must have kept them a week or more. He was very persistent in asking for guns, and seemed hardly to realise the fact that the birds were useless. He had possibly been out in the scrub for weeks—perhaps covered in boughs and perched in a tree awaiting for the "Great Birds" to come to feed in the tree, when he would be prepared to shoot them with his bow and arrows. Samuel White writes in his notebook under heading of 28th July:—"We have been skinning all day, but there was a great falling off in the quantity of things brought in by the natives. I skinned nine Birds of Paradise to-day, which were in all stages of plumage from full to no plumes at all. They are chocolate colour of different tints all over, and often quite destitute of plumes. I have gone in to-day for ethnological specimens a good deal.

A variety of things were brought and offered, but everything is very dear, the natives know not how to ask enough. To-morrow I shall go over on the Wokan side to try for some flies, as I think it is a good place." Then again on the 29th he wrote:—"This morning at sunrise I had a boat swung out. Two of the crew with Cockerell and myself started to ascend the creek on the Wokan side of the Wateilai Channel. This creek I call Cockerell's creek, because Cockerell was the first of our party who ascended it. I took provision for two days, a fly net, boxes, pins, bottles, etc., but no gun, for I intended giving up all my time to insects and leaving Cockerell to look after the birds. We crossed in the boat, and down

the Watalli Channel about 1½ miles, when we arrived at the mouth of the creek running in on the Wokan side, it enters in a northerly direction, and winds about for the distance of about a mile, through a densely-wooded and picturesque country, the banks on either side were rocky and thickly covered with beautiful and varied vegetation. It was early morning, and although the day was a cloudy one and the sky threatening the picture around us was very beautiful. The calls of many birds were heard as is usual at early morn in the tropical scrubs and forests, and amongst others we heard the loud "Wark, Wark" of the Great Bird of Paradise.

After we had rowed about a mile in this creek in salt water, our progress was suddenly ended by a huge reef across the creek, about four feet out of high water, here the salt-water ceased, and fresh water runs into it during rains. We now left the boat which I sent off to the yacht, with orders to meet us in the morning of the next day at the same place. My companion and I walked up the creek for about four miles, through fresh water varying in depth from ankle deep to up to our waists. The bottom of the creek for the whole distance is bare rock (Coraline limestone) the water had ceased to flow, or almost so, and it lay in long pools varying in depth from a few inches to three or four feet. After wading up the creek for about four miles we were nearly at its source in the centre of the island of Wokan. The land although very undulating, rough and rugged is very low, the only rises I could perceive as we walked up the creek, being a few ledges of rock over which the rain water tumbles and there rises averaged about a foot high, and occurred several times in a mile. The bottom of the creek was bare rock, without mud or sand. At the source of the creek is a native plantation, where they have made a partial clearing, and were growing a variety of plants for food. It was here I was expecting to find numbers of insects, but long before we reached the spot rain began to fall, and continued at short intervals all day. It was a poor day for anything, and I only captured about a dozen flies, besides a few beetles.

As the weather was so wet we decided not to stay the night, but to return to the village a little below where we entered the creek and try to get a canoe to take us off to the Yacht, as I had told the men not to come off for us till next day. Cockerell shot a few good birds. Little could be done in the wet, and I could take more flies in Australia in an hour than here in a day. On our return I captured several interesting flies, and Cockerell procured several beautiful little Kingfishers, with bright-blue backs and yellow breasts.

Upon arriving at the village which is composed of one large house, it was not difficult to persuade one of the men to take us in his canoe to the Yacht, and be it said to the credit of the natives generally, that they were always willing to render me assistance of this kind when I have been benighted or astray among them. They of course always expected to be rewarded with a little tobacco or some other thing, and I never failed to pay them liberally. We reached the yacht wet and cold about dark, and I was glad I had returned as there were no less than eleven Birds of Paradise to be purchased, these were not all plumed of course, but a fair proportion had plumes, to barter for all these kept me vigorously at work till just on midnight, the guns were all gone, but the breech loaders, and these had to be shown to prove there was not a muzzle loader left, then the birds had to be purchased with a variety of things such as powder, shot, beads, axes, knives, calico, handkerchiefs, iron wire, and sovereigns such bartering I never experienced before. The trading will begin by asking for tens or fives of everything, and reduce the numbers as business progresses, during all this time the cabin of my little craft is filled with men so full that no one can move, the heat is very oppresive, all talking at once and at the top of their voices. This goes on hour after hour, and after I have had a fatiguing day's walk in a tropical scrub, it requires all the patience I possess to keep me from losing my temper, but I am determined not to show anger at any trifling annoyance, as these people do not mean to be offensive.

So this evening I concluded our bargains, and we parted if not quietly (for these people are excessively boisterous) we did so with satisfaction on both sides. A number of things were purchased such as, birds, insects, shells, baskets, implements, etc. A young cassowary that was offered I could not buy as the owner would be satisfied with nothing but "Sopie" (Grog.) I am frequently asked for spirits, but I do not mean that they shall have a drop of it, as it is a useless and dangerous luxury, that they can well do without. I have suffered exceedingly all day to-day with chafed flesh. It frequently happens that persons in these warm climates have their flesh break out into a rash, prickly heat, etc, especially in the over-heated parts, such as under the arms, round the waist, inside the thighs, etc. Mine seems on the inside of the thighs, and the desire to scratch is irresistable, and our hands being continually in arsenic the skin may have become poisoned. However my flesh has broken out into festering sores. I am not the only one, for those who have to go out and do as I do are as bad,

and the wet to-day and chafe of our wet clothing has made Cockerell and myself perfectly raw, and it is with difficulty we can get about, indeed if it gets much worse we will be laid up."

The next day the 30th, my father remained on board all day for he and his two taxidermists were very busy curing specimens. Several Birds of Paradise were brought on board, and many other birds and natural history specimens were bartered for, but my father seems to have been suffering very acutely with his flesh sores aggravated so by his wet trip inland.

In a very brief note written on that day by my father he says:—"About 10 o'clock this morning a Macassar man came with a Bird of Paradise and is here still (midnight) he expected a gun for it, but my muzzle-loading guns are all gone, and the fellow cannot realize the fact. The day has passed as usual—crowds of natives filled the ship. I have not been too tolerant with them to-day. I have been a good deal out of temper, having suffered all night, and to-day very much with my sores, the wetting yesterday has not done them any good. Rain has been falling all day." The man referred to in the above note remained on till the morning when my father tried all kinds of ways to get rid of him or purchase the bird, but to no purpose the fellow wanted a gun and was fearfully disappointed about not getting one, at last when he found that the owner was leaving his ship he accepted a sovereign and a variety of other things. These other Malays are the worst class of men to deal with for they will remain or come back day after day and renew their bartering. The Aru men are quite bad enough in their persistent ways, but the Macassar and Malay men are far worse. As soon as my father got rid of all the natives on board he ordered out the big boat and a crew, and made up the Watalli Channel, a light breeze sprang up, and a sail was hoisted, but after a mile or so it died away and they resumed pulling, which was continued for four hours and arrived within a few miles of the end of the channel. When the tide changed and became too strong, and he had to turn back owing to the wet, and not having a tent with them. In some notes written some time afterwards, my father says: "The channel did not turn suddenly to the north-west as I expected it might, but kept in an easterly and north-easterly direction, the bends were not excessive although not straight anywhere.

After we left the yacht a few miles behind, the channel became a little narrower, (about 400 yards in the narrowest

place). The scenery was exceedingly beautiful as we passed along, the channel looked like a broad and noble river, the tide-like stream running at the rate of two or three miles an hour. The banks in some places were perpendicular rock, and in others low and muddy, the land on either side was low, very uneven, indeed rugged, and densely clothed with luxurious vegetation of many species, amongst it here and there a cocoanut struggled through and showed its head amongst the rest of the vegetation. The very edge of the cliff grew thick scrub, and trees at times grew on the bare face of the cliff, spreading their roots and grasping every inequality of surface or every hole in the rock. During the first four miles we passed about a dozen houses of the natives, generally not more than one at one spot placed on the points of land that jut out into the water here and there, and where the soil on the rock is a little deeper than usual, here the natives half clear the land, and plant their food stuffs, the houses are built in the usual way on piles, thatched with palm leaves, and the sides formed with mats. One man was building a new house alongside the old one, it was not very extensive, but must have been nearly 30 feet long, it had two raised floors, which were about seven feet apart, the first floor being about that distance from the ground. We passed many tributaries to the Watalli Channel like the Wanumbi creek, but most were shallow and shot off from the main stream on either side. Although I did not reach as far as I desired I was gratified and much pleased with the scenery, I consider it extremely beautiful, and am sure if it were within reach of civilized parts of the world it would be much frequented. In many places we observed fresh water falling over rocky banks into the salt water of the channel at such places we frequently landed after an hour or so's pull in the sun (as the sun shone out very warm between the showers), and my men refreshed themselves with cool clear water, which comes from the dark dense tropical scrub and falls in cascades into rocky basins before it finally mingles with the water of the ocean.

We reached the yacht before dark, and I felt as though I had ended a good day's work, but far worse than all the work are the sores that are increasing both in size and number in places about my body. When warm and the perspiration is running, the horrible itching and smarting at times seems almost as much as I can endure, several times to-day I have been on the point of jumping overboard to wash away the perspiration, but am afraid the salt water may aggravate the

wounds. There were a great many natives on board when I got back, but they bring but little now. The weather to-day has been very disagreeable, being both hot and wet."

August 1st, my father gave orders to have the yacht shifted with the ebb tide, and at ten o'clock she was under way, and came out of the Watalli Channel. There were several natives on board when the anchor was heaved, one had a live Bird of Paradise tied by the leg to a stick, it was a fine bird, five or six years old, perfect all but the side plumes, these were only a few inches long, and of a very dull straw colour. The poor bird fluttered, bit, and screamed, the owner refused several axes for it, and took it away as the yacht got under way. He either did not know what he wanted for it, or could not explain. My father, writing under the above date, says: "We came out of the channel with both the wind and tide, and were soon in the big open bay at the mouth of the Watalli Channel, here I intended dropping anchor, but I was busy below, and the Captain disobeyed my orders in not calling me. He went on to the north-west point of the bay, I fear it is too far to return, or I would have liked to settle the doubt as to there being a passage for a boat from the Watalli Channel to the village of Maykor, but I think it very doubtful. We dropped anchor early in the afternoon, and most of the men went on shore. The weather was much finer than yesterday."

17.—ANDREWS LOST AGAIN.

Monday, the 2nd August, the yacht remained at anchor, and my father spent the morning packing away many of his specimens, and clearing up his specimen room and cabin. In a few notes he says: "It seems strange after the last few weeks of rush and bustle to have a little time to myself, and I now find time to have a good clean up and put things away. I think my sores are better after a day's quiet." Andrews went off in the morning with a gun, and Cockerell left in the afternoon, but neither of these collectors put in an appearance at dark, and were given over as bushed. About 11 p.m. Cockerell turned up after a very rough time in the scrub. Andrews was out all night and nearly all the next day. My father set out in search of him, and at length he located the missing man's whereabouts by firing his gun several times and awaiting Andrew's answering shot. Samuel White in his note book makes the following comment: "Andrews out all night, had to go after him. He must have had a lively time of it as the mosquitos are very troublesome in this part of the island. This is the second time within a few days that my taxidermists have lost themselves. This corner of the island seems to be a quiet spot, no natives living here, and there are no cocoanut palms to be seen, consequently a few great Birds of Paradise live here in quietude, and their calls could be heard from the yacht. As soon as I got Andrews on board and saw that he had some nourishing food after his wet and rough time in the tropical scrub, I took Cockerell, ordered a boat out, and landed a little distance up the coast. We went in search of the great bird, and we were successful in securing three fine specimens. I had a good opportunity of watching these beautiful birds to-day, and I still find that their actions resemble those of the Rifle Bird of Australia. Some of them clung to the branches of the tree in which they were dancing, with their backs downwards, stretching their wings, and waving their plumes, and giving forth their loud cry of wark, wark, repeated several times. I was unable to stay out very long owing to my sores giving me much pain when I walked, and the country is full of 'Lawyer Palm', which makes travelling very difficult under any circumstances. While out after Andrews to-day I observed more palms than usual, some of them very tall and slender, perhaps 70 feet high and not more than six inches in diameter, being but a trifle larger at the

lower end, than near the top. I saw a good many cycads, which were like those growing in Australia. The country here as elsewhere is low, and in many places the soil is very shallow, notwithstanding which there are some very large, and tall trees growing at frequent intervals. Birds were not numerous, except the 'Great Bird' and a large rail, but the latter is shy, and as it runs on the ground and amongst the undergrowth it is difficult to obtain; the natives sometimes snare them. The 'Great Bird' is the shyest of them all. If a stick is cracked, or the slightest noise be made whilst approaching him he is off in an instant. As we lie here at anchor a corner of the island lies to the south of us, the Watalli Channel to the east, the little round island of 'Pulo Babi' (Pig Island) to the north, and the open sea to the west. Northward from Pulo Babi lies the island of 'Wamma,' on which is situated the town of 'Dubbo,' a very old trading port for the Malay and Macassar men, and distant about twelve miles. I will not visit Dubbo this time, as there is nothing to interest me more than I have already seen. I have been very troubled of late with the master and crew, and have determined to return to Australia and fit out with fresh Officers and crew." This is the first time that my father mentions the trouble with his officers and crew, but he had been suffering a great disappointment for many days, and had to put up with a great deal of insolence from the master. The weather was still showery as usual. On Wednesday 4th, the anchor was heaved, and Samuel White gave instructions to the master to make along the west coast of the Aru's and fetch up at the south end of the Island of Trangan. The wind was very light and weather finer than usual. The yacht kept on her course all night, but the wind being light she made very little headway. About nine next morning the wind freshened, and about 11 a.m. the vessel came to anchor off the west shore of Trangan. Some of the natives were soon off, and the crew with one officer went on shore with the big boat to cut and bring off firewood. Samuel White seems to have stayed on board, as he was very distrustful of his crew, and his suspicions were well founded as subsequent events will show. The next day the crew were busy bringing off wood. Cockerell went on shore and returned with a few birds, amongst them two beautiful little King Birds of Paradise. My father seems to have found it hard to make up his mind to return when there was so much work in front of him; he paced the deck nearly all that night, and seems to have made up his mind, for I have found the following notes written on Satur-

day 7th of August: "I gave orders this morning to trim ship by putting some of the stores in the skinning room aft, stowing away firewood, and had some spare cable chains shifted aft. I am afraid the master will drop to my move, and guess that I intend to return, I have not told him of my determination yet. A number of natives came off this morning to sell their stuff. I purchased platted and coloured mats, cocoanuts, fish, and many other things, like the rest of Aru's things they are very dear. I had to give a flat cake of tobacco for every four nuts, one cake of tobacco for three small fish. The men who came on board to-day had a very feminine appearance, both in features, and the way they dressed their hair. Many of them tied up their hair in a bunch behind, and adorned it with beads, and wore ear-rings. As soon as all was clear and straight I gave orders to get the anchor up, and then gave the master his course, and told him to keep on the one course till such times as I gave orders to alter it. I wonder if he guesses that I am returning, but I am determined to return and refit, and reman my vessel before visiting New Guinea. I find that my officers, crew, and staff are altogether unfit for this kind of work. The master is especially a beastly fellow, and quite unfit for his position. At dark we were still in sight of the island we had left at mid-day, for the wind was very light. So the land of the Aru's and 600 miles of a nasty choppy sea between us and Australia, thus for a time (it was the last), and once again I must bid farewell to the land of the 'Burong Matti' (Great Bird of Paradise), and the 'Gooby Gooby' (King Bird of Paradise), an out-of-the-way corner of the earth that few Europeans ever visit. I know of only three Englishmen who have ever been there. They are all "Cranky bird or bug hunters." In this land some of the most singular and beautiful of God's creatures live and die amongst a wonderful tropical scrub. My stay has been short, and the first voyage will terminate much sooner than I anticipated, for I intended to have been out two years at least. I am determined to re-fit, for I cannot put up with insolence and bad manners on my own boat. The collecting in the islands has exceeded all my expectations, and had I gone the route and time I expected, and had been as successful all the way my collection would have been a very large one. As it is I have a nice little collection of birds, about 800 to 1,000, besides other things. A list of the birds I will make out when I have time and an opportunity to compare and examine them." It seems that my father gave the sailing master his course, but upon going on deck before morning he

found the yacht heading for the New Guinea coast. An encounter followed, of which I have no record, but from that time on Samuel White mostly steered the ship himself, and watched day and night, a strain in fearfully bad weather which was encountered, and there is no doubt all that upon a man who had over-worked himself in a tropical country, was the shortening of his life. My father took a greater command over the yacht, and he set her course south, and day after day battled through a heavy sea, and the owner of the ship kept her on her course for hours drenched to the skin. He put few, if any, complaints on paper, but seems to have written a few notes at odd moments, and these I will give as they are written from day to day.

Sunday, 8th. "Since yesterday the wind has been changeable. We have been making between three and four knots, although I have had the craft close hauled. My watch on deck is almost continuous now, I cannot trust anyone. If the weather keeps as it is now I will keep the vessel on this (starboard) tack for about a week, and if she still steers south will bring about the Coburg Peninsula, then lay along the coast of Australia to Cape York. The glass is falling, and the weather looks like changing. Monday, 9th. Since yesterday the weather has kept dull and threatening. I am having continual trouble with my officers and crew. There have been numbers of birds about us, although we are hundreds of miles from land. This morning there were several tropic birds round the ship, and all the morning thousands of flying fish were rising out of our course. There seems to be two species of them, one a much larger one than the other, and they are not seen together. This morning I discovered that there were bugs in my cabin, some of the beautiful crew forward had brought a stock on board at Sydney, and they have now found their way aft. I have lived most of my life amongst vermin in the bush, but I am sure if I had flies, mosquitoes, ants, sandflies, leaches, spiders, centipedes, scorpions, snakes, and a thousand other pests found in the bush, and put them all together they are not a tenth part as bad as that disgusting pest. I find a white crew can be in every way as dirty and treacherous as a black one." A few notes written by my father, and which I fancy were made on the 10th simply say: "A heavy wind came up last night, and we have been plunging into a terrific sea. There is not a dry spot on deck, and it is impossible to keep dry. The continual watching and exposure is making it hard for me. While at the islands I did not use a coat, but now I have warm clothing

and an oilskin overall, but cannot keep dry or warm. Wednesday, 11th. Last night I went aloft and saw a red glow which I fancy was from a bush fire on the Australian coast. I put the yacht about, but at sunrise there was no land in sight. A nasty heavy sea is running, and we are taking it at a bad angle, which causes much water to come on board. I am standing on the starboard tack again to-night. 12th. Had to face off to the west last night owing to the heavy seas, and to-day we are beating up to the east. At daylight this morning the sea looked angry and black; the sun rose through a heavy bank of clouds. We are making heavy work of it to-day. 13th. Had to put the yacht about several times last night, but have her on the port tack, and will keep her there if possible to cross the Gulf of Carpentaria. The wind has gone more to the south, and the sea is not so high, still a nasty short one is worse. I had frequent soundings taken during the day, and the bottom of the ocean is very uneven, for at some castings of the lead only five fathoms of water shown, while at the next cast no bottom could be touched. 14th. Have been running into a heavy head sea all night and to-day, and I will be glad to get over to the east side of the gulf. I am having much trouble with my crew to make them obey orders. A large waterspout was seen to-day not very distant from the ship. The wind is blowing strongly again, and I have had to reduce the sail again. 15th. I changed the course again at eight bells this morning. My little vessel was making hard and dirty work of it, for terrific squalls accompanied by rain burst over us very frequently, and with a heavy sea made the craft plunge a great deal. 16th. We had a bad night; the yacht was thrashed with wind and rain, and dowsed with heavy seas all night. I have lost all confidence in my officers and men, and have to remain almost continually on deck. I have been drenched for days now, first with fresh water, and the next five minutes with salt. I will be glad to get to Cape York, when I can have a rest and straighten these fellows up. A heavy sea carried one of the boats off the davits, but fortunately it hung by the painter, and we were able to get it on board again with only the loss of the side-benches. The seas are running very high to-night. 18th. The sea is running high still, and wind blowing hard, this makes thirteen days of very dirty weather. No land in sight. I will be glad when the strain is over. 19th. The wind went down towards morning, and the sea moderated some, but at daylight rose again, and the sea regained its former height. In spite of the weather birds

have been with us all through the voyage. Last night a little black backed tern came and sat on the skylight close to me while I was at the wheel, and allowed me to put my hand on it, for it was exhausted with battling against the wind and sea. Several little companies of tropic birds have been seen at different times. A day or so ago I saw an unfortunate white-faced heron trying to alight on the vessel, but the wind blew so hard that after several attempts, and every time he blew to leeward and had to beat up again, then he went off with the wind, and if he ever made land would be an emigrant to the Aru Islands. 20th. Wind and sea went down somewhat this morning, and I was glad of the rest for I took a little sleep. My position shows me at noon to-day to be nine miles to the leeward of Booby Island, so put about on the other tack. My officers and crew are playing cards all day, and I have a job to keep any kind of discipline on board, and have ordered the watch on deck myself more than once. To-day a white tern came on board and sat close to me. I put my hand on it, and it flew off, and it soon returned and sat about the deck for hours, then seemed rested and flew off. I took it up once and found its body very thin and wasted like the others I had captured on board, and appeared as if they had been out for weeks at sea. 21st. The wind and sea got up again last night, but moderated again at noon. I find that I am out of my reckoning, and have grave suspicions that the chronometer has been interfered with. The ship was put about, and at 4 o'clock this afternoon Prince of Wales Island was some distance to windward, and at dark I ordered an anchor to be let go. I felt anxious not knowing our exact position and knowing that several reefs are situated around us I had a man stationed forward all the night, but nothing was seen. I smelt smoke distinctly, and believe it came from Prince of Wales Group. 22nd. Lifted the anchor and stood for a few hours towards Red Wallace Island, which was in sight, then tacked in towards the strait, when the wind fell and a strong tide set in, so I had an anchor let go. 23rd. This morning at daylight we got under way and beat through Endeavour Straits with a strong head wind until we reached York Island, and here anchored in six fathoms of water till the tide changed, which did not take place until 4 o'clock, when the wind rose and blew very hard. Weighed anchor and beat up to Albany and dropped anchor a little after sunset. Thus prematurely ends the first part of my expedition after five months' hard sailing, and an expenditure of £5,000. Out of this I have had about four or five weeks

collecting, with one man besides myself. What my crew will do or what I will do with them I am now making up my mind, but what ever happens they will find a rigid discipline and control put upon them. A short time after anchoring Mr. Jardine kindly sent off the letters and papers addressed to the yacht.

"WEETUNGA," SAMUEL WHITE'S LAST RESIDENCE

18.—THE LAST DAYS.

In notes dated the 24th August, my father writes:—"To-day the men have been off cutting firewood. I went up to see Mr. Jardine and ascertained that one of his boats was going to Thursday Island to meet a steamer on her way to Sydney. This offered me an opportunity to write, so I came off to the yacht to do so. Weather very squally and the wind very strong at times. The 26th. Spent the morning with Mr. Jardine. He has kindly undertaken to take care of my craft if I wish to leave her for any time, and also to have a sheet of copper put all round her to secure her from marine insects. In the afternoon I set a couple of the men to clear out the port store room in order to get out a cask of meat; I then went on shore. Cockerell has gone off into the bush to stay a day or two. The weather has been moderately clear and without rain, but the wind is still blowing hard. 26th: To-day I packed up many specimens, birds, and shells and spent the evening with Mr. Jardine. The weather is milder, but the wind is still strong and sky clear."

On Friday, 27th, my father seems to have had more trouble with his captain, and he ordered the anchor up, and made sail for Thursday Island, which was reached in a few hours. In company of Captain Pennefather, Samuel White went to the Senior Magistrate, and it was arranged that the captain and crew would come before the Bench next day. In a few notes written on the day my father says:—

"At the invitation of Captain Pennefather I went on board the Government Schooner 'Pearl.' This schooner is owned and kept by the Queensland Government, and has only recently been put into commission; she has been until recently the survey ship owned partly by the British Government after the manner of all the colonial survey ships. About a year ago she was in the market, and I was nearly purchasing her, but an unavoidable delay proved fatal. She is a schooner of about 50 tons measurement, carries two six pounder Armstrong guns, and appears to have a large native crew on board; she is kept for the regulation of the pearl fisheries, the settling of disputes, and a little exploring between times."

The next morning my father breakfasted with the Captain of the "Pearl," then appeared against his crew, who were sent down to Sydney. He seems to have let a Mr. Robb have

all his ship stores, intending to get fresh supplies when he returned. There were some things which had to go into bond. It seems that the weather was so rough that nothing could be landed from the yacht, and Samuel White passed most of his time on his craft at anchor. On September 1st he writes:—"Spent most of the day on board; went to see Mr. Robb and arranged with him to store all my stuff. He will come himself and take it from the ship, put what he does not want into bond, and make use of the remainder for himself. Capt. Pennefather came on board, and I lent him my big swivel gun, and gave him a bag of shot and a bag of wads. I do not think I will get away this week." It seems that the yacht and owner remained in the same spot for another week. He could not get rid of his stores, so sold flour, sugar, rice, biscuits, rum, brandy, ale, beef, etc., etc., for £25, which cost £200, and the rest of stores were put into bond. Then he arranged with Mr. Jardine to send his men over to Thursday Island and take the yacht over to Cape York to be laid up. On the 15th Samuel White and his two taxidermists were still waiting for the crew from Cape York to shift the yacht, and under the date my father writes:—"This morning I nailed down some boxes of specimens, and found that some of the boxes had been opened, and many of the specimens removed, and upon examination I found some one had been in my cabin, and taken most of my tortoiseshell and all my pearls. Thus I have been robbed by my crew from the time I started till they left me."

On the 26th of September Samuel White, with one taxidermist (Cockerell) boarded the Somerset bound down the coast, and the yacht was to sail for Cape York that day to be under the care of Mr. Jardine. Samuel White joined his wife in Sydney, and had only been there a few days when on the very day he arranged to purchase a home on north shore for his wife and family while he was away to finish his expedition, he caught a chill, inflammation set in, and on November 17th, 1880 there passed away one of (if not) the greatest field ornithologist the world has ever seen. He possessed a most kindly and loveable disposition, by far too good natured. He was a great musician, chemist, photographer, intrepid explorer, a keen soldier, a sailor as this brief sketch shows, but above all and in every sense of the word a Man.

Among my father's papers were some notes evidently written upon his last voyage from Thursday Island to Sydney; they were very brief, pointing to the fact that he intended enlarging upon them at a later date. The first notes deal

with the islands on which my father collected the birds, The land everywhere is very low and even swampy at this time of the year (he says):—The Islands, "The Aru Islands consist of a great number of islands of all sizes. The largest are divided from each other by narrow channels holding salt water, and appear no more than rivers, or such was the appearance of those I was in. The names of the principal are Tragan on the south, Kobror, Maykor, Wokan, and Wamma. The last named is much the smallest, and most northerly, but is notable as containing the old trading village of "Dobbo", and is situated at the northern end of the group, which extends from north to south for about 100 miles. The islands are variously laid down and divided in different charts, and I believe the two admiralty charts that I have are quite wrong so far as they apply to the parts I have visited. Wallace's Chart at page 442 of his "Malay Archipelago" is by far the most correct, indeed, had it not been for this map I should have been a long time finding the Watelai Channel, had I been in it I should not have known it by the Admiralty Charts, for it is quite absent from them. The land everywhere is very low and even swampy at this time of the year. There is not one mountain in all the Arus. Had there been a hill of any size it could have been easily seen from the sea-ward. Tragan is the highest and most undulating; grassy patches of large extent can be seen along the west coast. The islands are composed of soft, white stone, which look like limestone, in many parts quite bare, in others covered in black mud or mould, but not to any great depth, and of a vegetable nature, and very rich. Consequently there are no water wells, but water was running or lying everywhere. All along the west coast from end to end there was a good anchorage at this time of the year quite close in shore for a vessel drawing from 10 to 15 feet. The most southern of my anchorages was at the south end of Tragan; from this we dropped anchor in places all along and beyond the island of "Pulo Babi," first a quarter-of-a-mile from shore in four fathoms, next a mile from shore in seven fathoms, then a few hundreds of yards from shore in three and a half fathoms. Again at the village of Maykor a quarter of a mile from shore there was four fathoms, and at half a mile there was 15 fathoms. All through the Watelai Channel we bottomed at seven to sixteen fathoms. Along the coast the bottom was rock and sand, and in the channel it was bare, soft rock, over which the chain rumbled when the tide changed; in one or two places soft mud was found. The beach all along the west

coast was either sand or rock. Where sand occurred it was merely a bank covered with low dense vegetation, when over this, a low, wet country begins, covered with dense tropical forest. A good deal of rock occurs along the shores of the bay, into which the Watalli Channel enters, and for want of a proper name, I called it "Pulo Babi Bay." Here the banks are not high, and once over them a low, wet scrub is entered, wet at this time of the year, for rain falls nearly every day; but when a fine day or two comes along there is a great diminution in stream and pool, so that I have no doubt that in the drier part of the season the scrubs are quite dry and water scarce, but in July and August the climate is cool and moist, with abundance of water everywhere. There are no rivers, only small creeks, and then not deep, excepting when the salt water flows up them, and these are fringed with mangrove swamps. It was a great wonder to me that there were not more mosquitoes. They did not trouble us very much on board, only in the scrubs, and then not so badly as I have experienced them in many parts of Australia. Possibly they would be more troublesome from December to March.

19.—THE ARU PEOPLE.

"The people of the Arus, who assisted me in collecting birds, especially the Great Bird of Paradise, are without doubt the most mixed of human beings. I had not the time to study these mixed races, but they appeared to be on the whole well-made, muscular men, especially those from the 'Blackangtana' (bark country). They were taller and longer limbed men, with a great number of beads and other ornaments about them, and a greater number of frizzly heads. They evidently had more of the Papuan blood in them. The Aru people are not black. Many are a pale brown, others somewhat darker. Many who lived on the Watalli Channel and in the interior had their hair cut short, while others wore it long and frizzly, standing out all round, making a man's head the size of a half bushel measure! In some there seemed to be a slight skin disease, and some had their hands and spots about their bodies white, or spotted white and black; they did not appear dirty, but the big mop of hair in some instances was in a disgusting state. I saw some men with long frizzly hair tied up in a bunch on top or at the back of the head, which, I thought gave them a very feminine appearance, especially as litle hair grew on their faces. Some old men were seen with short stubbly beards, but the majority had little or no beard. I noticed several men who had one or more moles or spots on various parts of their faces, out of each mole grew several hairs; these seemed to be cultivated till they had reached several inches in length, this being the only hair upon their faces. Most of the men go nearly naked, having nothing to cover them but a long, narrow strip of coloured calico round the waist and brought up between the thighs. The Malay or Macassar men are mostly draped in loose folds of calico. There is a great difference in character also between the Malay and the Aru men. The former is diffident, docile, and not given to talking, shows little expression on his face, rarely smiles; indeed, some look so solemn that one would think it were a serious thing to live. The Aru men are the contrary, for they are talkative, even boisterous and impulsive; they will sing to themselves, and always chant a song while paddling, often to the music of a tom-tom or a gong; they thronged the yacht all day long, packed themselves as closely as they could stand, and would not move for anyone to pass until their toes were trodden upon. They pulled everything about, and watched with attention everything that was going on. At meals every

mouthful and every movement was taken note of, much to the annoyance of my father, officers and crew; they all talked at once and incessantly as loud as they could yelp, hoot and yell at each other till nothing else could be heard. Their greatest redeeming quality is honesty. Although this crowding went on for weeks, and many things lying about which must have been a great temptation, yet nothing was missed but a hand lead and line which some of the crew accused the natives of taking, but I am confident they did not take it, and thought I heard it fall into the water. They did not take a pin or a piece of paper without asking for it. They are as a whole strictly honest, and although they are but savages, they are a pattern for their more enlightened brothers. A good many of the Aru men speak Malay, so that I was able to get along with them very well, as I learnt a good deal of the Aru language as well. One could not say that they are industrious, although they work plantations, but like all savages, are idle, their greatest pleasure being chewing and talking. They chew "Betel Nut" lime and green leaves, sometimes mixed with a little tobacco if they can get it, and carry this chewing to a great excess. I am afraid they would be great drinkers if they could get it, as I have been asked for "Sopi" (spirit) hundreds of times. Some men have refused everything else in exchange for birds, but I hardly ever indulged them, without it be a chief, and never in exchange for anything else. Their homes are good, passable structures, always built on piles raised from the ground five or six feet, have a split bamboo floor, and an opening through the centre as an entrance. The sides are usually of mats, and the roof thatched with palm leaves. The only ornaments seen in the houses were trophies of the chase, such as cassowaries' feathers and bones, fish tails, bird feathers, etc. The utensils for preparing food and holding water, etc., were rough clay pots. Some with very wide mouths in shape much like the old three-legged iron pot; in these they boil their food. Gaudy coloured plates and basins were seen, but these came from Dubbo. Many families had a copper or brass gong. Some of the houses are large, being 30 feet long, and several families dwell in them. The villages are small, consisting of one to three or four houses, scattered anywhere from the coast to the interior. Their plantations are all well fenced with spars laid on their sides about two inches apart, and three or four feet high; this is to keep wild pigs out. In many places they construct pig traps by making little shoots or leads with stakes driven into the ground, and a cross-piece lashed along the top with rattan. The lead is about five or six

STREET SCENE IN DUBBO, 1914.

yards at the entrance, and about a foot or less at the other end. A pig on the outside would be tempted by the green vegetables inside, easily find his way in at the wide end of the lead, and when once inside would not find the small opening to return. For these plantations a piece of land is selected which has more than ordinary depth of soil; it is, of course, in the midst of a dense tropical scrub. The land is partially cleared by cutting down most of the trees, and leaving them lying on the ground to decay away. The crop is then put in the virgin soil among this labyrinth of tree trunks, and grows luxuriantly; it consists of sweet potatoes, yams, sugar cane, etc., and sometimes, not always, bananas. The cocoanut grows anywhere without clearing for it, but this tree requires from five to ten years to come into full bearing. At the time Wallace visited the Aru Islands cocoanuts were not known but there are a great many full-grown trees now. The natives do not care to part with the nuts; they ask an enormous price for them, or indeed for any of their products. Bananas are as dear, if not dearer, than in Australia. I have seen several kinds of bananas growing in the plantations when out in search of birds. The milk of the young cocoanut forms a delicious and wholesome drink, but it is not often one can indulge oneself in the Aru Islands. Besides their vegetable foods the natives obtain large quantities of fish. They catch them in small nets, but more frequently by spearing them at night by torchlight. Then the men and boys are good archers, and shoot numbers of birds, now and again a wallaby, and upon rare occasions a pig; they also snare the terrestial birds as well as mammals. The men and boys always have bows and arrows with them. When rambling through the bush I have on several occasions not known my exact whereabouts. This is very easily managed when the sun is so often obscured by heavy clouds, and every yard of that country is dense bush. Coming suddenly upon a village or hut I would ask one of the men to put me in the right direction; that he would do without amoment's hesitation, and if he only had to go twenty yards he would bring his bow and arrows and mat. This mat is an extremely useful article; it is made of the leaves of the pandanus palm, neatly sewn together three or four thick; it is about four feet by three, is doubled once, and the end sewn up so that it is like a sack with the top and one side open. This mat then forms the men's seat or bed; it is very soft; should it rain, he can open it out and put it over his head, when it will cover the head, shoulders, and back, and no rain will go through it; if it is cold, he does

the same, or if the sun shines too hotly he can make an umbrella of it. The boys shoot well with their arrows, and brought dozens of birds to me which had been shot with blunt-headed arrows. Have frequently tried their skill. They can hit a biscuit at twenty yards almost every shot. The natives are fond of shooting with a gun also, but they rarely can get ammunition. Some of them have old flint muskets. They were awestricken when the breach-loaders were first shown them. While at Wanumbai they would not leave the guns alone. As soon as they were put down one of the natives had them and was pulling them about showing and explaining to the rest; often I had to send my fifty guinea gun off to the yacht, as it was not safe to allow such inexperienced people to handle it.

There were few of the Aru women seen, and it is my impression that they are not allowed to speak to strangers, and this also applies to the girls. Whenever I came suddenly upon a home where there was a woman at work, she would drop whatever she had in her hand and rush up into the house. If I met one in any of the little tracks through the bush she would run and hide. I always passed on without taking the slightest notice, but I think this shyness soon wears off. I had a better opportunity of seeing some of the little children, for I made it a practice to give them beads and other presents when I saw them, then the fathers and friends of others would bring them for me to look at, but the poor little things were as much terrified as if they had been taken to see a wild beast. Both men and women adorn themselves with beads and other ornaments of brass, pearl, tortoise shell, finger rings, earings, and necklaces; the beads in greatest demand among them are mixed white and coral red. The Aru people are very fond of keeping pets of all kinds. Dogs, cuscus and birds, as well as fowls, cockatoos and parrots of the most brilliant plumage, and every conceivable hue were brought to me, generally tied by the leg to a piece of bamboo bent into the shape of a triangle, and it is surprising how tame they appear. This is no doubt due to the training they get. The natives are continually mauling every thing they have, either dead or alive, and are often very cruel to them; indeed they have neither thought nor feeling for them. Poor wounded birds are tied by the legs to a stick and kept hanging and fluttering till the leg mortifies, or they die of starvation. The dogs they have about them are diminutive, ill looking, half-starved mangy curs, and can be useful for nothing but making a noise. The brutes are a pest and source of constant anxiety. When I camp near a village, they prowl about all night, and if anything is left within their reach they

are sure to carry it off. I know not what religious views the Aru people possess, or if they have any. All the natives have canoes, and the larger prau is plentiful, the former being a mere "dug-out", made out of a solid log hollowed out in the centre, and they are from 18 to 30 feet long, by 12 to 18 inches wide, well-formed, sharp at both ends, and have a good shear. Some have a couple of cross beams projecting over each side 4 to 5 feet, and have a piece of bamboo or cocoanut fastened fore and aft, with rattan to form an outrigger, and give the craft more stability. These boats will hold 3 or 4 or even 6 to 8 men who propel them with short spade-like paddles at a good pace. The larger vessels are much better craft, they are regularly and ingeniously built on a keel, which does not add much to the draft of the craft. Every plank is hewn out of a solid log, and cleats are left every two feet in the solid wood; these cleats when the planks are in their places, come opposite to each other, and form rows from keel to gunwale. These, after they have been boarded vertically, are fitted with bent pieces of wood made to fit and touch every cleat, and are laced down to them with rattan, these form the timbers of the ship, and the planks are hewn to an inch or an inch and a half in thickness with the cleats about two or three inches deep. The scarfs are generally curved, and about a foot long, the plank being laced to the keel, the latter in some instances being continued at one end to 8 or 10 feet above the craft, and ornamented at the top. The planks are bevelled one edge to the other as well as being laced, and the whole is made tight by caulking with cocoanut fibre. These boats usually have a deck of split bamboo lashed down with rattan, and a small neat house built on this, into which the crew can creep. It is propelled with short broad paddles, or a large mat sail made of pandanus leaves sewn together, and hoisted on a bamboo yard to a triangle or tripod mast, and lashed down to the craft. Of course these boats can only sail before the wind, and they are going continually from the Blackang-tana to Dubbo with articles they have for barter. The trade of the Aru people must be very limited, for there was nothing that I could see that is worth trading for.

The Paradise plumes appear to be the chief thing they sell, and they fetch 20/ each; very few pearl shells, and still fewer pearls are found. I had a few pearl shells offered me, by some of the boats which were passing on their way to Dubbo, and the price asked for small shells was five rupees a pair. The pearls offered me were very small, and a few edible birds nests and some sugar cane seemed to be all the Aru people could trade in

except it be a little "Trepang" which I should judge as very poor quality, it being a very different article from that which I have been used to seeing in the straits. The edible birds nests seemed to be valued at about threepence to sixpence each. Every kind of fruit and vegetable was very scarce and dear.

Minerals in the Aru Islands are wanting. I did not see or hear of any. The whole of the country seems to be of a limestone formation.

20.—THE FAUNA AND FLORA OF THE ARUS.

—Mammals.—

The Mammals of the Aru Islands are not so numerous in species or specimens as in most parts of Australia, nevertheless small mammals such as rats of various kinds are by no means scarce in many districts. They frequently annoyed us, by destroying our food and specimens. The largest of the animals which came under notice while I was camping on the islands was the pig, and I found that in his wild state he was a lanky ungainly looking beast (the Malay name for this animal is *"Babi"*). The only species representing the kangaroo on the island is a wallaby of moderate size, and a distinct species. The greatest distinguishing mark being a broad white bar on the thigh. It is very like some of our scrub wallaby. The natives at times catch these animals in snares, and I have had them brought to me tied by the legs till the limbs are swollen and numb, or coiled up in a basket where they must have been confined for days or weeks, so that in either case the unfortunate animals could not walk, and never lived more than twenty-four hours after being liberated. The next in size to the wallaby is the cuscus, a tropical opossum of large size, and with a tail which is prehensile and bare of hair for half its length. This animal lives amidst the foliage of the trees, and feeds upon the young leaves and shoots in a similar manner to some of the Australian opossums, but the cuscus differs from the opossum of Australia in colour, and its fur is very thick and woolly, and often of a dirty, creamy white. The ears are very short, and the skin about the face, especially about the eyes and nose, is a bright, pinkish flesh colour and gives a decided character to its appearance. The texture of the skin of the cuscus is very different from that of the Australian opossum; the skin of the latter is tough and capable of making good thin leather, but the skin of the cuscus is so tender that it will not bear its own weight while skinning, and the greatest care must be observed to get it off the animal whole. When the cuscus is brought in by the natives it is never perfect. If in a dead state it is sure to have been struck with something to kill it, which always breaks the skin, if alive it is sure to be bound with rattan, which cuts the skin about the legs or other parts, and even when brought in baskets the creature's struggles damage it very much. The carcase is usually very fat, the flesh white, and

much esteemed by the natives. Three colours are represented in my collection. A middle-sized one with light grey upper surface and a large one of a dirty creamy white, and a small animal whose fur is creamy white with large and irregular blotches of black. I procured about eight other species of small mammals, such as rats, some of these being large, some small, some had coarse hair, others fine fur, some were water rats, some lived in the scrub amongst the fallen timber and rocks, whilst others took up their abode with the natives in their houses. One animal was very like our bandicoot, but was very small and had a very long nose and short tail, another was closely allied to the squirrel, having a long bushy tail, and it was of a dark brown colour. From the number of species and specimens I procured during my short stay, I should think that the rodents and small mammals were fairly represented in the Arus. The bats are very numerous, some subsist on fruit and vegetables, others feed on insects like small bats. One noisy fellow is as large as a small dog, with a long snout like a hound, pleasant looking eyes, short-pricked ears and wings, which measure considerably over four feet across. Then there are others whose bodies are not bigger around than one's finger. I procured five or six species while hunting in the Arus, the larger ones were shot like birds with the shot gun, but the small ones were captured in fly nets like night moths.

—The Birds of the Arus.—

The birds of the Arus are plentiful in some districts, yet there are places where a collector would fail to find two or three species. Owing to the short duration of my visit, it may be I am not competent to judge of the number of species. I recorded over two hundred species, and saw and heard others. I did not procure all the species to be found in the island, and nearly all the birds are to be found either in Australia or New Guinea, yet there are some species confined to the island and found nowhere else, the chief of which being "the Great Bird of Paradise" (*Paradisea apoda*), and called by the natives "Burong Matti." This magnificent creature is not found in any other part of the world other than the country of the Aru group. It measures 18 or 19 inches from the bill to the end of the tail, not including the wire feathers, which are 20 inches longer, these long wire-like tail feathers, and the side plumes adorn only the old male birds, the females and young of the first year or so are almost uniform chocolate brown, being a little darker on head and chest. It is stated that the birds must live ten years before they arrive at perfection, and this is

not unreasonable when we know some of our birds in Australia require several years to perfect their plumage. I have observed that the common "Rosehill" parrot (*P. adelaidensis*) when kept in confinement will improve in depth and brightness of plumage for 7 or 8 years, and I am of the opinion that the lovely bird of Paradise may take quite as long or longer to come to maturity. I have been able to procure some good series of this bird. The first year or two of their lives there is little difference between the sexes without it be that the males are a little larger, then a light yellow tinge appears on the back of the neck, and the chest is darker brown, then the head becomes mottled with yellow, and a few green feathers appear on the chin, and the two central tail feathers lengthen out, but are mottled on both sides, after this the head becomes bright citron yellow, the chin and the throat are covered with short scaly features of emerald green, and of metallic brightness. Around the base of the bill is a ruff of hair, like feathers, of a deep green, the feathers stand out on end, and look like plush; the bill is of a light leaden blue, and the eyes have brightened to a deep citron yellow; the tail feathers now lengthen to a foot or eighteen inches, and the web disappears except at the end of an inch or so when they are half an inch broad; the next stage—the colours all brighten, the eyes become very bright and sharp like a hawk's, the chest is deep purple brown, the central tail feathers have grown to 24 inches or more, and are destitute of web with the exception of a little at the base; the bird is now perfect with the exception of the plumes, scarcely a sign of which can yet be seen. The plumes appear a few inches at first, and are of a brownish yellow colour, increasing in length, volume and brightness every year. When half grown they are pale yellow, but when full grown they are about 24 inches long and of the most intense orange yellow at the base, with a finer gloss than silk lustre and depth of colour gradually dying away towards the tip into a soft brown. These birds must be seen alive or freshly killed to realize their full beauty; in life they are most beautiful birds, and have made the heart of the Naturalist beat and bound when he had one of these glorious birds within his grasp for the first time. When the great Bird of Paradise is adult or nearly so, he ranks amongst the shyest birds in the world, he resorts to the highest trees in the scrub, and the cracking of the smallest stick under one's foot, or the sight of any moving object is sufficient to send him off. The easiest and best way to obtain these birds is to take advantage of some of its habits; one peculiar to the family is to repair in the forenoon to certain large trees, when they pro-

duce their loud call of "Cark" or "Wark" repeated several times, and with the old birds the voice is much more deep and sonorous than the females and young males. On the large horizontal branches of the large trees, the male birds dance and display their plumes, and it is now that the Naturalist can procure his specimens. I have called these birds into a tree under which I was standing by mimicking their voices; they have several calls besides the loud call "Wark" one a low soft note when feeding, but when caught or wounded they give a call much like a domestic fowl when being caught. The natives ascend their dancing trees and conceal themselves in the lower branches to get at shorter range and shoot them with blunt or often pointed arrows. Just before evening a man brought me a fine bird, but with not much plume. It had been hit with a blunt arrow on the tip of the wing, which was dislocated. The man who had brought it told me he had a dead bird for me (Burong Matti), all my senses told me this was not the case, for the bird was fighting, struggling, and squeaking vigorously, yet the fellow persisted in it being a dead bird, but are we not just as absurd, for the Naturalist has named it the legless bird of Paradise, which is not the case, for it possesses exceedingly strong and well developed legs and feet, quite as strong if not more so than our common crow, which fit it for a variety of purposes, for I have seen it moving in the tree tops when feeding with the ease and activity of a *Ptilotis,* and at other times clutching a large branch, and throwing its heavy body and great plumes about with the greatest ease. Whether *Linne* when he named this bird really thought they existed without legs is a puzzle. The food of this bird seems to be entirely fruit, the stomachs of all those examined did not contain a single insect, but were crammed with fruit of several kinds, some were filled exclusively with wild nutmegs, and most of them contained the remains of this spice. When the bird had been feeding upon this fruit, the flesh of the bird smelt strongly of spice The stomach of this bird is large and membranous, the carcase never fat, but very muscular, the bones compact and strong, the neck being long and the skin dry and very tough, adhering very closely to the body; about the throat the skin is thick, loose and lined with several layers of thin watery membrane, which gives that part a fluffy appearance. The side plumes, although voluminous spring from a patch of skin on each side of the breast. not larger than a half crown piece, the skin here is compact, hard, and firmly attached to the muscles of the breast, which tear away with the skin when skinning, if a knife be not used. What is most surprising in this bird is the hardness and tough-

ness of its skin, while the flesh is decomposing. I have had birds brought to me that have been killed a week or more, the flesh being green, rotten, and stinking, maggots crawling from the eyes and mouth, but strange to say, with the exception of the thin membrane on the abdomen the skin was still tough, and the feathers firm. After a little washing, an operation these bird's feathers bear remarkably well, a good skin can be made. Any other bird under these conditions would have been minus its feathers before half finished. They are birds that will stand a lot of handling, for I have seen a native bring a bird for sale, and while coming to terms (it sometimes requires hours to complete a bargain), constantly rub the bird up and down, rub it on his arms and face, press it, pat it, stroke it, till I have been nearly crazy, and felt as if I would like to knock the fellow down and trample him underfoot. When the purchase has been completed I have had to take the bird and wash it with soap to remove the stains the beast had left on the delicate yellow plumage. The natives maul everything alike, and some of the small birds were spoilt, but they soon learnt to do better. Some small birds were brought to me in a filthy state, and I showed the fellow who brought them what he had done, and what he should do in future. I then threw the birds down, and made him take them away. After this they learned to bring in the birds, strung through the nostril with rattan, and then they would string five or six small birds on the one piece of rattan, most of them alive and squeaking, fluttering and crawling, till scarcely one in the bunch had any feathers on the neck or back. The great bird was my great quest, and I offered liberally for them, indeed, extravagant prices for freshly killed birds, for I knew that they were rare and shy, and the natives alone knew their haunts, so with a little exertion and a liberal distribution of tobacco I persuaded hundreds of men and boys to go out and hunt in every part of the islands for specimens. I have had as many as fifty men come in at once with birds for which I would have to give four pounds worth of goods to each man, and amongst others there would be two or three of the great birds. Towards the end of my visit I had practically all the men of Aru Islands collecting for me.

The bird next in importance to the Great Bird, if not in beauty and singularity of plumage, is the little King Bird (*Cicinurus regia*) of the naturalist, and called by the Aru natives "goby goby." It is a small bird, and that which a collector would call a "gem". In its actions, habits, and call it is a miniature *P. Apoda*, and it seems as it were to mimmick

the great bird, excepting in style and colouring of the plumage, which is deep glossy red on all the upper surface. The feathers on the front of forehead are of an orange tint, and short and hair-like, standing on end, and look like plush, the feathers extending beyond the nostrils; the throat and chest are shining purple red, a border of dark green crosses the breast, and the rest of the underplumage is pure white, but the side plumes, and these feathers are the greatest peculiarity. The side plumes are about an inch and a half long, about six or seven broad feathers, square at the ends, and are of a brown colour, and have a broad band of golden green near their tips. The tail is very short, extending no further than the ends of the wings, which are short and round, but the two central tail feathers are lengthened into two thin wires about seven inches long, crossing each other at the end of the tail, and diverging again at the tips. These wires take a spiral turn at their extremities, where they are broadly webbed, forming a button like tip to each feather or wire, and are of a deep shining green. Taken all together this bird is very peculiar and beautiful. Besides these, Birds of Paradise and other species were very numerous in places. Hawks were not plentiful, and I saw but two species. I did not see or hear any owls. Crows were not numerous. Saw a large fruit-crow with glossy-black plumage, beautiful blue eyes, and an enormous bill, this bird was not uncommon, but very shy. Parrots were plentiful, and of several species, and closely allied to those found in Australia, and several of the cockatoos were identical. Amongst the parrots were some very varied and beautiful birds, the same with the pigeons, especially the fruit pigeons, some of which were most gorgeous birds, and several species are found in Australia as well as the Aru's. Kingfishers were abundant, and of many species and colours, and several of the Australian species are found amongst them. Two species of swallows were seen—the edible bird-nest swallow and an Australian species. The former is remarkable for its nest, which is half-cup shaped, and attached to the walls of caves round the coast; it is composed of tough semitransparent gelatine, which the natives collect and sell in Dubbo, to be sent to China as a delicacy. There are scrub turkeys (*Talagallus*), and Megapodes, both good for food, and the natives catch them in snares, but not very often. The eggs of the Megapode are very large and laid in a mound to hatch in the same manner as the allied species in Australia. The Cassowary we did not see, although I saw numerous traces of it and also its eggs. Quail and Finches I saw none nor did I see any country suitable for them. There

was only one duck, the *Tadorna radjah* of Australia. Two cormorants, one all black and the other black and white. Several cranes were seen and collected, most of them Australian. Amongst them the well known Nankeen Heron (*Nycticorax caledonicus*). Perhaps amongst the aquatic birds none was more remarkable than the large brown rail. It is a fine bird as large as an ordinary fowl, but not so low set for they had fairly long legs. The natives call it "Sarah", and its beautiful large red eyes, the bright green bill and legs, as well as the blending of the soft brown and grey of the plumage claims the admiration of the naturalist, but the most remarkable thing about the bird is its tongue, its loud discordant craking is heard everywhere, where the land is low and wet. The slightest noise is taken as an excuse for a fresh outbreak, the report of a gun, or one man calling to another is sufficient to set a couple of them going at the top of their loud voices, but the bird is a difficult one to see or shoot. It is found in the thickest of the underbrush, and its long powerful legs carry it noiselessly from all danger. The natives sometimes catch them in snares which is the surest way of obtaining them, for while a man with a gun is struggling through thorny vines, these active birds have not the slightest difficulty in evading him.

—Fishes.—

Fishes in the waters around the Arus are plentiful and varied; they were seen in schools everywhere round the coast. The water at night was alive with them, and an incessant splashing was kept up, but to our surprise and disgust they would never take a bait, although we frequently tried, and although the vessel was surrounded by fish every night we never on any occasion caught a fish with hook and line. The natives catch large quantities. Their plan is to take a canoe near to the edge of the reef, and by the light of a fire spear them, or wade in shallow water with lighted torch in one hand and a spear in the other. The natives did not care to sell their fish. All the time we were at the Arus they did not offer a fish for sale, but when off the island of Trangan I purchased two small fish out of half a boat load by offering more than their worth of tobacco, but could get no more. The fish I have seen with the natives are varied in species. Many of them look like those we call mullet, snapper, bream, rock-cod, parrot-fish, and many others, including "sting-rays" beautifully marked with green, blue, and white, indeed there seemed to be fish of all sizes, shapes, and colours. A species of flying

fish seemed to be numerous. I observed them in numbers two hundred miles from shore. They were a small species. long and slender, of a silver-white colouration which made them conspicuous little objects in the bright sunlight over the dark blue water as they took their arrow-like flight of from 10 to 40 yards within a foot or so of the waters surface. They emerged suddenly from the water and maintained a straight course with the wind "abeam" or a little on the quarter, and when the sea rose before them they disappeared into it. Their transparent wings when in motion are not visible, giving to the fish a strange arrow-like motion. When near the coast small fish trooped about in countless thousands, and I have seen some curious scenes of destruction amongst them. Upon one occasion I observed an assemblage of small fish which seemed to be a few rods square and a few feet deep. They were so closely packed they could not steer, but had to all go in one direction. Behind these had collected about a dozen large sharks, and over them a thousand sea birds of various species and sizes. The sharks would at intervals make a rush forward with open mouth and engulf hundreds of the small fry at a time. At this time thousands of fish would make a simultaneous leap out of the water in a solid mass (as if they had been thrown up with shovels), and alight a few feet in advance to escape from the huge jaws of their monstrous enemy, but not to escape a host of hungry birds which instantly swoop down and each carry off a mouth full. This state of affairs went on for an hour or more, and I saw that as each shark, or bird had its fill it dropped behind, or soared in the air away from its still hungry mates.

—Insects.—

I was surprised to find that at the time of my visit the insects were not more numerous in the Arus than in tropical Australia at the same time of the year for it is well known that at the end of the rainy season in the tropics is the best time for insect life of every kind. However, I procured a few nice beetles from the natives as well as by my own collecting. I one day chanced to see a couple of dead specimens of two species of longicorns. I showed them to the natives and made them understand I wanted them, and would give tobacco and beads for them. I soon had a good quantity of longicorns brought in, some in bamboos where they had bitten one another into pieces. Some had their legs tied to prevent them getting away; some were tied in bunches by their antennae, but to my horror many of them had all their legs torn off to disable them,

others had their mandibles broken off to prevent them biting, but a good few were perfect. A small assortment of beetles and bugs was obtained. Lepidoptera were scarce, at least at this time of the year. I did not get more than a dozen species, and those were nearly all small, some of them are found in Australia, and others I have met with in New Guinea. Ants were not so numerous or varied as met with in Australia. The green tree-ant is the most plentiful. Millepedes, centipedes, and scorpions I saw of moderate size, but not very numerous. Spiders were far more numerous and varied; they spread their nets everywhere in the scrub to our annoyance. Some were large and had great expanse of limb, some were short limbed and heavy bodied, some were hard and others soft, some spiked all over, and there were others twice as broad as long. Some few species seem similar to species found in the southern part of Australia, and others closely allied to those found in Northern Queensland. Mosquitos and sandflies were not so numerous or troublesome as I expected; they did not trouble us on board the yacht, but we found them both in the mangrove swamps. Wasps were not numerous we found to our great satisfaction, nevertheless the small nest building species were seen occasionally, and some of our party discovered that they could sting as vigorously as the Australian species with which they seemed identical. It seems a small fly not more than half and inch long, and builds a nest of leaves about the height of a man's head by drawing a number of large leaves together and fixing them with web. It is usually placed on the edge of the thick scrub or the small openings in the scrub, and is not easily seen. A number of the little pests cluster on the outside evidently on guard, and when an intruder approaches, fifty or a hundred attack him about the neck and face. It is laughable to observe a man who is sent in advance of you both walking stealthily through the scrub in search of game, suddenly seized with a fit of antics, throws down his gun, birds, bags, etc., throws his arms about, knocks off his hat, and makes a frantic rush through the thickest of the scrub regardless of thorns or tangle. If the man behind is an old hand he knows what is the matter, and darts off quietly in another direction and sits down, and listens to his mate (if addicted to profanity) indulging in a number of foolish and useless words. Presently he proceeds on hands and knees stealthily to where his property is lying, and recovers it as best he can without attempting one of the many vengeances he vowed against the wasps a few minutes ago. From my own experiences I can say their stings are severe for a short time. Although they do not last long and

leave a lump for a few days, it is very annoying to find that although I have retained hold of everything in my hands I have while endeavouring to brush the insects off my face knocked my concave spectacles from my eyes. To recover them I have had to return and hunt them up amongst the dead leaves on the ground, perhaps to be attacked again. It will happen sometimes that the insects will enter the ear or nose and thus confined will sting three or four times, giving great pain with swelling and inflammation. I have found "Barry's Tricopherous" very useful in such cases.

—Reptiles.—

The reptiles of the Aru Islands are not plentiful. Small lizards are the most abundant; of snakes there appears to be few. I saw some very beautiful green ones with white markings, one seen was about five feet long; these are "Tree Snakes". A good many marine serpents were observed in the seas around the islands, but they were the same as found in Australian waters. One curious large lizard seemed to be fairly plentiful in the scrubs; it had a curious lappel under the chin edged with spikes, also a comb-like piece on the head also spiked. I have seen an allied species in Australia. Several large lace lizards were brought in, beautifully speckled with black and yellow. The natives brought frogs of gigantic proportions, fine fellows that measured a foot to fifteen inches from nose to toes. These were caught in the wet low country, or the banks of the small streams, sometimes up trees, and like the lizards were frequently shot with arrows. The frogs were huge creatures of a dull livid colour, lacking that brightness and vivacity some frogs possess, the ground colour was a dull dirty orange and brownish yellow. The creatures were brought tethered with a piece of rattan, and when placed in the sun laid themselves out and died without a movement. Some of the men ate them and pronounced them good. I am under the opinion that there are a few turtles round the coast, but none came to our share. The natives would not let turtle pass through their hands if they had it.

—Vegetation.—

The vegetation is very similar to that found on the north coast of Australia, and the south coast of New Guinea. It is a dense tropical forest or scrub covering nearly every mile of surface of the low islands. On Trangan there is an exception, for the land is much higher, and a large portion of its surface is covered by tall coarse grass, and bare rocks stand up

through it here and there, belts and patches of scrub cover the lower parts. Trangan is the most southerly of the large islands. Most of the trees and plants seen resemble those I have seen in Northern Australia with a few exceptions. I noticed a tree whose young shoots drooped in long bunches and tinted of various colours from a greenish or pinkish white to a scarlet, looking at a distance like blossoms. Another I had not seen in Australia was a mangrove with a large white or pinkish white flower resembling in shape a convolvulus; this was a straggling small tree, and grew in the salt water on the banks of the Watelai Channel. The common mangrove grew to great perfection there. Some of the trunks were eighty feet long at least; some fine specimens grew on the banks of the Wanumbai River. In some parts of the islands there were some magnificent trees very tall, but not very robust; among them were those that bore a large fruit like an orange, but was pithy inside. The nutmeg trees were very tall, and the fruit appeared in every way like those I have met with in Australia, and like them when the spice has arrived to perfection the brownish green pericarp opens and lets fall the nut covered with a network of scarlet mace, the nut is long in shape, barely half an inch through it, and scarcely an inch long. The tree which excited my admiration most was the *Casuarina*. They were noble specimens of the genus, some of them a hundred and fifty to two hundred feet high, and stout in proportion. They grew on the lowland bordering the coast, and were very conspicuous from seaward. The dark green almost black foliage and pointed tops of these trees was in marked contrast to the usual scrub foliage, forming a broken fringe all along the west coast of the islands (they did not grow inland). Under these trees grew palms, tree ferns, palm lawyers, and other plants, as well as creepers and vines in abundance. In places there were patches of large and tall bamboos, and wherever the native settlements were, cocoanut palms were growing and bearing well. This is an introduction by order of the Dutch Government. The nuts appeared to me to be of fair size, and the flesh very thick."

In a few notes evidently made at the termination of his last trip, my father says—"I regret that I had neither time nor opportunity to make a Botanical collection, but one man cannot do everything. A collector's life, even if he confines himself to a few things, is an active and harassing one if he puts his heart into the work, or so I have usually found it and having assistants does not always relieve one altogether. At times I have sat skinning and curing specimens for days, from early morn till late at night, and at others scouring the

scrub for some particular specimens and have been induced by some of my hunters to take a long journey through thick scrub, over hills, plains, or swamps in quest of some information which is interesting to me. Many times I have been out several days then hurried back, tired and weary, to cure the specimens obtained which has often taken nearly all night; and I was so tired that it was impossible to write up my notes. Throwing myself on my bed (if I had one) I snatched a few minutes rest before rising again with the dawn to begin a fresh day with hardly time to wash or partake of food, and so it goes on for weeks and months, till frequently hard work and scanty living brings on some climatic fever, when one's labours suddenly cease for the time".

At times Samuel White seems to have jotted down his thoughts here and there. In some cases they were short, scrappy notes; some of these which are before me were written after his last voyage, and evidently he was musing over this for he says.—"I purchased a great deal from the natives while I was in the Aru Islands, and the birds they brought in would keep two men skinning, and hard at work at that, all day long, I induced them to persevere by liberal offers and payments. I made it a practice to make many presents to the natives and by treating liberally, induced them to bring hundreds of men and boys about me and most of them brought something they had collected, from a bird of paradise to a stone, or a broken shell. It was harvest time in the Arus during my visit, and these people had never seen anything like it before. During the time I was among these interesting natives I distributed 250 yards of calico, mostly coloured, hundreds of dozens of handkerchiefs, several hundreds of tomahawks, seventy dozen knives, 100 lbs. of beads, 10 cwt. of tobacco, twenty double barrel guns, 40 single barrel guns, 200 lbs. of powder, 20 bags of shot, 2,000 caps, ten dozen rugs, also tea, sugar, rice biscuits, and many other things besides 100 sovereigns. It can be well understood that some of these men said, 'Such times they had never seen before' ".

It is greatly to be regretted that this great field Ornithologist should have left us before he had put into writing his great achievements in the science he loved so much, and for which he suffered so many hardships—hardships which eventually cost him his life. He was a man of such retiring nature that he avoided any notoriety that would be likely to follow many of his great achievements and made as little as possible of his work, but I know that he realized that he had much information which would be valuable to science, and I also know that if he had been spared, it was his intention to record

much of his field work that it might be handed down to live after him. The subject of this brief sketch lived in those early days of a young colony when the wonderful pioneers required all the grit that a human being can possess,to make headway against those manifold difficulties which are always associated with pioneering. Consequently, my father's early tastes for natural history were much retarded, and in addition his parents, who did not realize the importance of their son's scientific research kept a check upon his hobby. In spite of all the obstacles thrown in his way Samuel White from his early childhood showed the greatest love for nature, especially birds, and during his boyhood days spent in a veritable bird paradise, at his old home at the Reedbeds, bird observation was always first in his mind. It was then he laid down the nucleus of a great collection and at the time of his death and long after, the earliest specimens collected were in a perfect state of preservation. Sad to say this great collection containing birds, which have now become extinct was scattered by the trustees to the four quarters of the Globe, a priceless collection which could never be assembled again, and this was done, of course against his express wishes and will. The great love for nature possessed by my father may have caused some who did not really know him, to think that he was eccentric; for instance he willed, that should he lose his life when upon one of his expeditions into the interior, no search should be made for his remains, but to allow them to rest surrounded by nature which he loved so much. Apart from all this, this naturalist made many friends, and I have known ship's officers, travelling companions and others go to great trouble to find him years after they had met. He told a good after dinner story and charmed his friends with his natural courteous manners and the accounts of his many travels, and experiences, whenever they could prevail upon him to speak of them. He was naturally a fine horseman and there is no doubt he took much interest in the raising of stock during his station days, but ever uppermost in his mind were his beloved birds. It was a byword in the family that "Whatever Samuel took in hand he mastered", and this is well illustrated when I look back upon his proficiency in music, chemistry, photography, and entomology as well as ornithology, he was a navigator although he had not taken out a certificate; still his bringing back his yacht upon his last voyage through uncharted seas proved this. Samuel White was no mean artist and when quite a boy painted a number of the Native birds of his district, four of which appear in this record and are

far more life-like in colour and contour than the illustrations in some ornithological works which have appeared since that time. My father had a wonderful influence over the aborigines of both Australia and New Guinea. He travelled and lived amongst the wild tribes of both countries for years, but not once did he ever have trouble with them. There was an old full blooded aboriginal who knew my father as a boy, who travelled very many hundreds of miles to find him, and when told that my father was dead he wept and mourned his loss for days, this is but one of many striking marks of affection borne by the natives towards my father. I am afraid his good nature was often, very often imposed upon, but it gave him the greatest pleasure to do a good turn to another. During his sojourns in England (a trip which was a great undertaking in those days) he loved to meet his old army friends, and he spent many an evening before the fire chatting over military matters, for he had the true martial spirit of the Britisher. He was proud to be a Britisher, and proud of all that was British. Of course the meetings with such men as John Gould, A. R. Wallace and other Ornithologists were red letter days to my father, and every conversation with them was burnt deeply into his memory. Many a time have I heard him quote John Gould and others in the old country upon ornithological matters. I feel sure John Gould the Author of "The Birds of Australia" knew that it was beyond dispute when he stated in his great work the credit due to my father for his discoveries in Ornithology and said, "I know of no one of my correspondents in Australia who is so keenly alive to the science of Ornithology", and he should have added, "done so much field work". When Samuel White died he left a widow, and young family to mourn their great loss, and since that fatal day, they have kept evergreen the memory of that wonderful pioneer and great field ornithologist. It is to be hoped that this brief sketch of a life by far too short, but still full of great interest, may convey to my readers some idea of the work accomplished by a great pioneer of this State and of Australian Ornithology.

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